

OCCUPATIONAL CODE, TITLE AND DESCRIPTION

Staff and Administrative Specialty Managerial Occupations

13002 - Financial Managers - Plan, organize, direct, control, or coordinate the financial activities of an organization. Include managers who negotiate general policy with financial or other institutions or managers in banks, or similar financial institutions, who advise on credit and investment policy.

13005 - Personnel, Training, and Labor Relations Managers - Plan, organize, direct, control, or coordinate the personnel, training, or labor relations activities of an organization. Work may involve establishing employer/employee relations policies; directing the selection, training, and evaluation of employees; administering benefits, safety, and recreation programs; developing wage and salary schedules; coordinating collective bargaining activities; and advising on labor contract administration.

13008 - Purchasing Managers - Plan, organize, direct, control, or coordinate the activities of buyers, purchasing officers, and related workers involved in purchasing materials, products, or services. Include Wholesale or Retail Trade Merchandising Managers.

13011 - Marketing, Advertising, and Public Relations Managers - Formulate marketing policies, direct sales activities, and plan, organize, and direct advertising and public relations activities for a department, an entire organization, or on an account basis.

13014 - Administrative Services Managers - Plan, organize, direct, control, or coordinate the supportive services department of a business, agency, or organization. Managers who spend less than 80 percent of their time in administrative services should be classified in another appropriate managerial category. Include Property Managers and Contract Administrators. Exclude Procurement Managers.

13017 - Engineering, Mathematical, and Natural Sciences Managers - Plan, organize, direct, or coordinate activities in such fields as architecture, electronic data processing, engineering, life sciences, physical sciences, statistics, and systems analysis. These persons spend the greatest portion of their time in managerial work for which a background consistent with that described for engineers, mathematicians, or natural scientists is required.

Line and Middle Management Industry Specific Managerial Occupations

15002 - Postmasters and Mail Superintendents - Direct and coordinate operational, administrative, management, and supportive services of a U.S. post office; or coordinate activities of workers engaged in postal and related work in assigned post office.

15005 - Education Administrators - Plan, organize, direct, control, or coordinate the educational activities of colleges and universities; elementary, secondary, or postsecondary schools; vocational or technical schools; or training and instructional organizations (or programs) in private business or other agencies.

15008 - Medicine and Health Services Managers - Plan, organize, direct, control, or coordinate medicine and health services in establishments such as hospitals, clinics, or similar organizations.

15011 - Property and Real Estate Managers and Administrators - Plan, organize, direct, control, or coordinate buying, selling, or leasing activities of real estate properties for clients or employer. Include managers of rented or leased housing units, buildings, or land (including rights-of-way). Exclude workers whose duties are not primarily managerial. Workers who are engaged primarily in direct buying, selling, or renting of real estate should be reported as Sales Workers.

15014 - Industrial Production Managers - Plan, organize, direct, control, or coordinate the work activities and resources necessary for manufacturing products in accordance with cost, quality, and quantity specifications.

15017 - Construction Managers - Plan, organize, direct, control, or coordinate, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Include specialized construction fields such as carpentry or plumbing. General Managers of large construction contracting firms should be reported as General Managers and Top Executives.

15021 - Mining, Quarrying, and Oil and Gas Well Drilling Managers - Plan, organize, direct, control, or coordinate, usually through subordinate supervisory personnel, the operations of mines, quarries, oil or gas wells, or other similar operations that extract natural deposits.

15023 - Communications, Transportation, and Utilities Operations Managers - Plan, organize, direct, control, or coordinate activities related to: Communications by telephone, telegraph, radio, or television; transporting people or goods by air, highway, railway, water, or pipeline; managing transportation facilities, such as airports, harbors, or terminals; managing warehousing and storage facilities; or supplying electricity, gas, water, steam, or sanitation services. General Managers of large establishments or operations should be reported as General Managers and Top Executives.

15026 - Food Service and Lodging Managers - Plan, organize, direct, control, or coordinate activities of an organization or department that serves food and beverages and/or provides lodging and other accommodations. Include Food and Beverage Directors.

15031 - Nursery and Greenhouse Managers - Plan, organize, direct, control, or coordinate activities of workers engaged in propagating, cultivating, and harvesting horticultural specialties, such as trees, shrubs, flowers, mushrooms, and other plants. Work may involve training new employees in gardening techniques, inspecting facilities for signs of disrepair, and delegating repair duties to staff.

Other Managerial and Administrative Occupations

19002 - Public Administration Chief Executives, Legislators, and General Administrators - Formulate and establish government policy and develop federal, state, or local laws, rules, and regulations. General Administrators who do not have overall responsibility for the state or a local government entity (e.g., county, city, town, or township) should be reported as General Managers and Top Executives.

19005 - General Managers and Top Executives - Top and middle managers whose duties and responsibilities are too diverse and general in nature to be classified in any functional or line area of management and administration. These managers generally work through departmental or subordinate executives.

19999 - All Other Managers and Administrators - All other managers and administrators not classified separately above.

Management Support Occupations

Accountants, Auditors, and Other Financial Specialists

21102 - Insurance Underwriters - Review individual applications for insurance to evaluate degree of risk involved and determine acceptance of applications.

21105 - Credit Analysts - Analyze current credit data and financial statements of individuals or firms to determine the degree of risk involved in extending credit or lending money. Prepare reports with this credit information for use in decision-making.

21108 - Loan Officers and Counselors - Evaluate, authorize, or recommend approval of commercial, real estate, or credit loans. Advise borrowers on financial status and methods of payments. Include Mortgage Loan Officers or Agents, Collection Analysts, and Loan Servicing Officers.

21111 - Tax Preparers - Prepare tax returns for individuals or small businesses but do not have the background or responsibilities of an accredited accountant or certified public accountant. May work for established tax return firm.

21114 - Accountants and Auditors - Examine, analyze, and interpret accounting records for the purpose of giving advice or preparing statements. Install or advise on systems of recording costs or other financial and budgetary data.

21117 - Budget Analysts - Examine budget estimates for completeness, accuracy, and conformance with procedures and regulations. Examine requests for budget revisions, recommend approval or denial, and draft correspondence. Analyze monthly department budgeting and accounting reports for the purpose of maintaining expenditure controls. Provide technical assistance to officials in the preparation of budgets.

21199 - All Other Financial Specialists - All other financial specialists not classified separately above.

Purchasing Agents and Buyers

21302 - Wholesale and Retail Buyers, Except Farm Products - Buy merchandise or commodities (other than farm products) for resale to consumers at the wholesale or retail level, including both durable and nondurable goods. Analyze past buying trends, sales records, price, and quality of merchandise to determine value and yield. Select, order, and authorize payment for merchandise according to contractual agreements. May conduct meetings with sales personnel and introduce new products. Include Assistant Buyers.

21305 - Purchasing Agents and Buyers, Farm Products - Purchase farm products either for further processing or resale. Include Christmas Tree Contractors, Grain Brokers and Market Operators, Grain Buyers, and Tobacco Buyers.

21308 - Purchasing Agents, Except Wholesale, Retail, and Farm Products - Purchase raw or semifinished materials for manufacturing. Purchase machinery, equipment, tools, parts, supplies, or services necessary for the operation of an establishment. Include Contract Specialists, Field Contractors, Purchasers, Price Analysts, Tooling Coordinators, and Media Buyers.

Personnel, Training, Labor Relations Specialists, and Related Occupations

21502 - Claims Takers, Unemployment Benefits - Interview unemployed workers and compile data to determine eligibility for unemployment benefits.

21505 - Special Agents, Insurance - Recruit independent insurance sales agents in field and maintain contact between them and home office. Advise agents on matters pertaining to conduct of business such as cancellations, overdue accounts, technical problems, claims procedures, new business contacts, and new products. May gather information for underwriter.

21508 - Employment Interviewers, Private or Public Employment Service - Interview job applicants in employment office and refer them to prospective employers for consideration. Search application files, notify selected applicants of job openings, and refer qualified applicants to prospective employers. Contact employers to verify referral results. Record and evaluate various pertinent data.

21511 - Personnel, Training, and Labor Relations Specialists - Conduct programs of recruitment, selection, placement, training, promotion, welfare, safety, compensation, or separation of employees. May specialize in specific areas such as labor-management relations, counseling, job analysis, position classification, training, or compensation. Exclude occupations in personnel research and in administration of testing and counseling programs for which a background in psychology is required. Exclude Employment Interviewers, Private or Public Employment Service.

Other Management Support Occupations

21902 - Cost Estimators - Prepare cost estimates for product manufacturing, construction projects, or services, to aid management in bidding on or determining price of product or service. May specialize according to particular service performed or type of product manufactured.

21905 - Management Analysts - Review, analyze, and suggest improvements to business and organizational systems to assist management in operating more efficiently and effectively. Conduct organizational studies and evaluations, design systems and procedures, conduct work simplification and measurement studies, and prepare operations and procedures manuals. Exclude Computer Systems Analysts.

21908 - Construction and Building Inspectors - Inspect new or remodeled construction to determine its soundness and compliance to specifications, building codes, and other regulations. Inspections may be general in nature or may be limited to a specific area, such as electrical systems or elevators.

21911 - Compliance Officers and Enforcement Inspectors, Except Construction - Enforce adherence to policies, procedures, or regulations and advise on standards. May inspect and enforce regulations on such matters as health, safety, food, immigration, licensing, or interstate commerce. May be employed in public or private sector.

21914 - Tax Examiners, Collectors, and Revenue Agents - Determine tax liability or collect taxes from individuals or business firms according to prescribed laws and regulations.

21917 - Assessors - Appraise real and personal property to determine its fair value. May assess taxes in accordance with prescribed schedules.

21921 - Claims Examiners, Property and Casualty Insurance - Review settled insurance claims to determine that payments and settlements have been made in accordance with company practices and procedures, insuring that adjusters have followed proper methods. Report overpayments, underpayments, and other irregularities. Confer with legal counsel on claims requiring litigation.

21999 - All Other Management Support Occupations - All other management support workers not classified separately above.

Engineers

22102 - Aeronautical and Astronautical Engineers - Perform a variety of engineering work in designing, constructing, and testing aircraft, missiles, and spacecraft. May conduct basic and applied research to evaluate adaptability of materials and equipment to aircraft design and manufacture. May recommend improvements in testing equipment and techniques.

22105 - Metallurgists and Metallurgical, Ceramic, and Materials Engineers - Metallurgists and Metallurgical Engineers: Investigate properties of metals and develop methods to produce new alloys, usages, and processes of extracting metals from their ores. Include Physical and Extractive Metallurgists. Ceramic Engineers: Conduct research, design machinery, and develop processing techniques related to the manufacturing of ceramic products. Materials Engineers: Evaluate, plan, and implement processes to develop new materials to meet product specifications, performance standards, and costs.

22108 - Mining Engineers, Including Mine Safety - Determine the location and plan the extraction of coal, metallic ores, nonmetallic minerals, and building materials, such as stone and gravel. Work involves conducting preliminary surveys of deposits or undeveloped mines and planning their development; examining deposits or mines to determine whether they can be worked at a profit; making geological and topographical surveys; evolving methods of mining best suited to character, type, and size of deposits; and supervising mining operations.

22111 - Petroleum Engineers - Devise methods to improve oil and gas well production and determine the need for new or modified tool designs. Oversee drilling and offer technical advice to achieve economical and satisfactory progress.

22114 - Chemical Engineers - Design chemical plant equipment and devise processes for manufacturing chemicals and products such as gasoline, synthetic rubber, plastics, detergents, cement, paper, and pulp by applying principles and technology of chemistry, physics, and engineering.

22121 - Civil Engineers, Including Traffic - Perform engineering duties in planning, designing, and overseeing construction and maintenance of structures and facilities such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, water and sewage systems, and waste disposal units. Include Traffic Engineers who specialize in studying vehicular and pedestrian traffic conditions.

22123 - Agricultural Engineers - Apply knowledge of engineering technology and biological science to agricultural problems concerned with power and machinery, electrification, structures, soil and water conservation, and processing of agricultural products.

22126 - Electrical and Electronic Engineers - Design, develop, test, and supervise the manufacturing and installation of electrical and electronic equipment, components, or systems for commercial, industrial, military, or scientific use. Exclude Computer Engineers.

22127 - Computer Engineers - Analyze data processing requirements to plan EDP system to provide system capabilities required for projected workloads. Plan layout and installation of new system or modification of existing system. May set up and control analog or hybrid computer systems to solve scientific and engineering problems.

22128 - Industrial Engineers, Except Safety - Perform engineering duties in planning and overseeing the utilization of production facilities and personnel in department or other subdivision of industrial establishment. Plan equipment layout, workflow, and accident prevention measures to maintain efficient and safe utilization of plant facilities. Plan and oversee work, study, and training programs to promote efficient worker utilization. Develop and oversee quality control, inventory control, and production record systems. Exclude Industrial Product Safety Engineers.

22132 - Safety Engineers, Except Mining - Apply knowledge of industrial processes, mechanics, chemistry, psychology, and industrial health and safety laws to prevent or correct injurious products or environmental conditions and minimize effects of human traits or product characteristics that create hazards to life and property or reduce worker morale and efficiency. Include Industrial Product Safety Engineers.

22135 - Mechanical Engineers - Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of such equipment as centralized heat, gas, water, and steam systems.

22199 - All Other Engineers - All other engineers not classified separately above.

Architects and Surveying and Mapping Scientists

22302 - Architects, Except Landscape and Marine - Plan and design structures, such as private residences, office buildings, theaters, factories, and other structural property.

22308 - Landscape Architects - Plan and design land areas for such projects as parks and other recreational facilities, airports, highways, hospitals, schools, land subdivisions, and commercial, industrial, and residential sites.

22311 - Surveyors and Mapping Scientists - Use surveying, engineering, and scientific data to determine and identify fixed points or boundaries, and prepare maps for legal and design purposes. Provide data relevant to the shape, contour, gravitation, location, or dimension of land or land features for construction, mining, land evaluation, or other purposes.

Engineering and Related Technicians and Technologists

22502 – Civil Engineering Technicians and Technologists – Apply theory and principles of civil engineering in planning, designing and overseeing construction and maintenance of structures and facilities under the direction of engineering staff or physical scientists.

22505 - Electrical and Electronic Engineering Technicians and Technologists - Apply electrical and electronic theory and related knowledge to design, build, test, repair, and modify developmental, experimental, or production electrical equipment in industrial or commercial plants for subsequent use by engineering personnel in making engineering design and evaluation decisions.

22508 - Industrial Engineering Technicians and Technologists - Study and record time, motion, method, and speed involved in performance of production, maintenance, clerical, and other worker operations for such purposes as establishing standard production rates or improving efficiency. Usually work under the direction of engineering staff.

22511 - Mechanical Engineering Technicians and Technologists - Apply theory and principles of mechanical engineering to develop and test machinery and equipment under direction of engineering staff or physical scientists.

22514 - Drafters - Prepare working plans and detail drawings from rough or detailed sketches and notes for engineering or manufacturing purposes according to specified dimensions. Utilize knowledge of various machines, engineering practices, mathematics, building materials, and other physical sciences to complete drawings. May use computer-assisted drafting (CAD) equipment and software.

22517 - Estimators and Drafters, Utilities - Develop specifications and instructions for installation of voltage transformers, overhead or underground cables, and related electrical equipment used to conduct electrical energy from transmission lines or high-voltage distribution lines to consumers.

22521 - Surveying and Mapping Technicians - Perform surveying and mapping duties to obtain data pertaining to angles, elevations, points, and contours used for construction, mapmaking, boundary location, mining, or other purposes. Calculate mapmaking information from field notes using reference tables. Draw maps of geographical areas from source data such as surveying notes, aerial photography, or other maps to show natural and constructed features, political boundaries, and other features. Draw topographical maps from aerial photographs or verify accuracy and completeness of topographical maps. Exclude Surveyors, Cartographers, and Geodesists.

22599 - All Other Engineering and Related Technicians and Technologists - All other engineering and related technicians and technologists not classified separately above.

Natural Scientists and Related Occupations

Physical Scientists

24102 - Physicists and Astronomers - Physicists: Conduct research into the phases of physical phenomena; develop theories and laws on the basis of observation and experiments; and devise methods to apply laws and theories to industry and other fields. Astronomers: Observe, research, and interpret celestial and astronomical phenomena to increase basic knowledge and apply such information to practical problems. Exclude Biophysicists.

24105 - Chemists, Except Biochemists - Conduct qualitative and quantitative chemical analyses or chemical experiments in laboratories for quality or process control or to develop new products or knowledge.

24108 - Atmospheric and Space Scientists - Investigate atmospheric phenomena and interpret meteorological data gathered by surface and air stations, satellites, and radar to prepare reports and forecasts for public and other uses. Include weather analysts and forecasters who work for radio and TV stations and whose functions require the detailed knowledge of a meteorologist.

24111 - Geologists, Geophysicists, and Oceanographers - Geologists: Study composition, structure, and history of the earth's crust; examine rocks, minerals, and fossil remains to identify and determine the sequence of processes affecting the development of the earth; apply knowledge of chemistry, physics, biology, and mathematics to explain these phenomena and to help locate mineral and petroleum deposits and underground water resources; prepare geologic reports and maps; and interpret research data to recommend further study or action. Geophysicists: Study physical aspects of the earth, including the atmosphere and hydrosphere; investigate and measure seismic, gravitational, electrical, thermal, and magnetic forces affecting the earth, utilizing principles of physics, mathematics, and chemistry. Oceanographers: Study topographical features, rock and sediment of the ocean bottom, and physical aspects of oceans, such as density, temperature, and sound.

24199 - All Other Physical Scientists - All other physical scientists not classified separately above.

Life Scientists

24302 - Foresters and Conservation Scientists - Plan, develop, and control environmental factors affecting forests, rangeland, and farmland and their resources for economic and recreational purposes through activities such as researching soil erosion, conducting fire prevention programs, reforestation, and preservation of natural resources.

24305 - Agricultural and Food Scientists - Research problems related to agriculture, animal husbandry, and horticulture, including the development of improved methods of cultivation, the processing, handling, and storing of products, and related activities.

24308 - Biological Scientists - Research problems dealing with life processes. Include Biologists, Biochemists, Biophysicists, Pathologists, Bacteriologists, Toxicologists, and Zoologists. Exclude Medical and Agricultural Scientists.

24311 – Medical Scientists - Conduct research dealing with the understanding of human diseases and the improvement of human health. Engage in clinical investigation or other research, production, technical writing, or related activities. Include Medical Scientists such as Physicians, Dentists, Public Health Specialists, Pharmacologists, and Medical Pathologists. Exclude practitioners who provide medical care or dispense drugs.

24399 – All Other Life Scientists - All other life scientists not classified separately above.

Physical and Life Science Technicians and Technologists

24502 - Biological, Agricultural, and Food Technicians and Technologists, Except Health - Assist scientists in laboratory and production activities by performing tasks necessary to experiment, test, and develop new and improved methods in production, preservation, and processing of plant and animal life.

24505 - Chemical Technicians and Technologists, Except Health - Conduct chemical and physical laboratory tests to assist scientists in making qualitative and quantitative analyses of solids, liquids, and gaseous materials for purposes such as research and development of new products or processes, quality control, maintenance of environmental standards, and other work involving experimental, theoretical, or practical application of chemistry and related sciences.

24508 - Nuclear Technicians and Technologists - Assist scientists in both laboratory and production activities by performing technical tasks involving nuclear physics, primarily in operation, maintenance, production, and quality control support activities. Work includes design, production, or maintenance of apparatus or products such as plant and equipment used for the release, control, and utilization of nuclear energy; development of industrial nuclear processes; and design, construction, operation, maintenance, or repair of nuclear plants.

24511 - Petroleum Technicians and Technologists - Assist scientists in the use of electrical, sonic, or nuclear measuring instruments in both laboratory and production activities to obtain data indicating potential sources of metallic ore, gas, or petroleum. Analyze mud and drill cuttings to determine petroleum and mineral content and physical characteristics. Chart pressure, temperature, and other characteristics of oil and gas wells, boreholes, or producing wells. Investigate and collect information concerning oil well drilling operations, geological and geophysical prospecting, and land and lease contracts from other oil fields that lead to the possible discovery of new oil fields.

24599 - All Other Physical and Life Science Technicians and Technologists - All other physical and life science technicians and technologists not classified separately above.

Computer, Mathematical, Operations Research, and Related Occupations

Computer Scientists and Related Occupations

25102 - Systems Analysts, Electronic Data Processing - Analyze business, scientific, and technical problems for application to electronic data processing systems. Exclude persons working primarily as Engineers, Mathematicians, or Scientists.

25103 - Database Administrators - Coordinate physical changes to computer databases and code, test, and implement the database applying knowledge of database management systems. May design logical and physical databases and coordinate database development as part of a project team.

25104 - Computer Support Specialists - Provide technical assistance and training to computer system users. Investigate and resolve computer software and hardware problems of users. Answer clients' inquiries in person and via telephone concerning the use of computer hardware and software, including printing, word processing, programming languages, electronic mail, and operating systems.

25105 - Computer Programmers - Convert project specifications and statements of problems and procedures to detailed logical flowcharts for coding into computer language. Develop and write computer programs to store, locate, and retrieve specific documents, data, and information.

25108 - Computer Programmer Aides - Assist Computer Programmers or Systems Analysts by performing computer-related tasks such as entering completed programs for conversion to machine instructions, writing simple programs to retrieve data, and other duties to assist in the processing of data or controlling of industrial processes.

25111 - Programmers, Numerical Tool and Process Control - Develop numerical control tape programs to control machining or processing of parts by automatic machine tools, equipment, or systems.

25199 - All Other Computer Scientists - All other computer scientists not classified separately above.

Mathematical Scientists and Related Occupations

25302 - Operations and Systems Researchers and Analysts, Except Computer - Conduct analyses of management and operational problems in terms of management information and concepts. Formulate mathematical or simulation models of the problem for solution by computer or other method. May develop and supply time and cost networks such as program evaluation and review techniques.

25310 – Mathematical Scientists - Conduct research in fundamental mathematics and in application of mathematical techniques to science, management, and other fields. Solve or direct solutions to problems in various fields by mathematical methods.

25312 - Statisticians - Plan surveys and collect, organize, interpret, summarize, and analyze numerical data, applying statistical theory and methods to provide usable information in scientific, business, economic, and other fields. Data derived from surveys may represent either complete enumeration or statistical samples. Include Mathematical Statisticians who are engaged in the development of mathematical theory associated with the application of statistical techniques.

25313 - Actuaries - Apply knowledge of mathematics, probability, statistics, and principles of finance and business to problems in life, health, social, and casualty insurance, annuities, and pensions.

25315 - Financial Analysts, Statistical - Conduct statistical analyses of information affecting investment programs of public or private institutions and private individuals.

25319 - All Other Mathematical Scientists - All other mathematical scientists not classified separately above.

25323 - Mathematical Technicians - Apply standardized mathematical formulas, principles, and methodology to technical problems in engineering and physical science in relation to specific industrial and research objectives, processes, equipment, and products.

Social Scientists and Other Social, Recreational, and Religious Occupations

Social Scientists, Including Urban and Regional Planners

27102 - Economists, Including Market Research Analysts - Economists: Conduct research, prepare reports, and formulate plans to aid in solution of economic problems arising from production and distribution of goods and services. Market Research Analysts: Research market conditions in local, regional, or national area to determine potential sales of a product or service; examine and analyze statistical data on past sales and wholesale or retail trade trends to forecast future sales trends.

27105 - Urban and Regional Planners - Develop comprehensive plans and programs for use of land and physical facilities of cities, counties, and metropolitan areas.

27108 - Psychologists - Collect, interpret, and apply scientific data relating to human behavior and mental processes. Activities are in either applied fields of psychology or in basic science fields and research. Include occupations in personnel research and in administration of testing and counseling programs. Exclude Psychiatrists.

27199 - All Other Social Scientists - All other social scientists not classified separately above.

Other Social Science Related Occupations

27302 - Social Workers, Medical and Psychiatric - Counsel and aid individuals and families with problems that may arise during or following the recovery from physical or mental illness by providing supportive services designed to help the persons understand, accept, and follow medical recommendations. Include Chemical Dependency Counselors.

27305 - Social Workers, Except Medical and Psychiatric - Counsel and aid individuals and families requiring social service assistance. Include Community Organization Social Workers who plan, organize, and work with community groups to solve problems. Exclude Chemical Dependency Social Workers.

27307 - Residential Counselors - Coordinate activities for residents of care and treatment institutions, boarding schools, college fraternities or sororities, children homes, or similar establishments. Work includes developing or assisting in the development of program plans for individuals, maintaining household records, and assigning rooms. Counsel residents in identifying and resolving social or other problems. Order supplies and determine need for maintenance, repairs, and furnishings.

27308 - Human Services Workers - Assist Social Group Workers and Caseworkers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse and human relationships. Aid families and clients in obtaining information on the use of social and community services. May recommend additional services. Exclude Residential Counselors and Psychiatric Technicians.

27311 - Recreation Workers - Conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. Organize and promote activities such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and hobbies, taking into account the needs and interests of individual members.

Religious Workers

27502 - Clergy - Conduct religious worship and perform other spiritual functions associated with beliefs and practices of religious faith or denomination as delegated by ordinance, license, or other authorization. Provide spiritual and moral guidance and assistance to members.

27505 - Directors, Religious Activities and Education - Direct and coordinate activities of a denominational group to meet religious needs of students. Plan, organize, and direct church school programs designed to promote religious education among church membership. Provide counseling and guidance relative to marital, health, financial, and religious problems.

27599 - All Other Religious Workers - All other religious workers not classified separately above.

Lawyers and Related Occupations

28102 - Judges and Magistrates - Judges: Arbitrate, advise, and administer justice in a court of law. Sentence defendant in criminal cases according to statutes of state or federal government. May determine liability of defendant in civil cases. Magistrates: Adjudicate criminal cases not involving penitentiary sentences and civil cases concerning damages below a sum specified by state law. May issue marriage licenses and perform wedding ceremonies.

28105 - Adjudicators, Hearings Officers, and Judicial Reviewers - Conduct hearings to review and decide claims filed by the government against individuals or organizations, or individual eligibility issues concerning social programs, disability, or unemployment benefits. Determine the existence and the amount of liability; recommend the acceptance or rejection of claims, or compromise settlements according to laws, regulations, policies, and precedent decisions. Confer with persons or organizations involved and prepare written decisions.

28108 - Lawyers - Conduct criminal and civil lawsuits, draw up legal documents, advise clients as to legal rights, and practice other phases of law. May represent client in court or before quasi-judicial or administrative agencies of government. May specialize in a single area of law, such as patent law, corporate law, or criminal law.

Legal Assistants and Technicians, Except Clerical

28302 - Law Clerks - Research legal data for brief or argument based on statutory law or decisions. Search for and study legal records and documents to obtain data applicable to case under consideration. Prepare rough drafts of briefs or arguments. File pleadings for firm with court clerk. Serve copies of pleading on opposing counsel. Prepare affidavits of documents and keep document file and correspondence of cases.

28305 - Paralegal Personnel - Assist lawyers by researching law, investigating facts, and preparing legal documents. May gather research data for use as evidence to formulate defense or to initiate legal action. These workers are career professionals, usually having either a four-year college degree or a degree from an institute specializing in the paralegal profession.

28308 - Title Searchers - Compile list of mortgages, deeds, contracts, judgments, and other instruments (chain) pertaining to title by searching public and private records of real estate or title insurance company.

28311 - Title Examiners and Abstractors - Title Examiners: Search public records and examine titles to determine legal condition of property title. Copy or summarize (abstracts) recorded documents which affect condition of title to property (e.g., mortgages, trust deeds, and contracts). May prepare and issue policy that guarantees legality of title. Abstractors: Summarize pertinent legal or insurance details or sections of statutes or case law from reference books for purpose of examination, proof, or ready reference. Search out titles to determine if title deed is correct.

28399 - All Other Legal Assistants and Technicians, Except Clerical - All other legal assistants and technicians not classified separately above.

Teachers, Educators, Librarians, and Related Occupations

Teachers - College, Junior College, University, Professional School, or Technical Institute

31111 - Lecturers - Responsible solely for preparing and delivering discourses on subjects requiring specialized knowledge. Exclude persons trained as lecturers but currently employed in positions not requiring the use of such training.

31114 - Nursing Instructors, Postsecondary - Demonstrate and teach patient care in classroom and clinical units to nursing students. Instruct students in principles and application of physical, biological, and psychological subjects related to nursing. Conduct and supervise laboratory experiments. Issue assignments, direct seminars, etc. Participate in planning curriculum with medical and nursing personnel and in evaluating and improving teaching and nursing practices. May specialize in specific subjects, such as anatomy or chemistry, or in a type of nursing activity, such as nursing of surgical patients.

31117 - Graduate Assistants, Teaching - Assist department chairperson, faculty members, or other professional staff members in college or university by performing teaching or teaching-related duties, such as teaching lower level courses, developing teaching materials, preparing and giving examinations, and grading examinations or papers. Graduate Assistants who primarily perform non-teaching duties, such as laboratory research, should be reported in the occupational category related to the work performed.

31201 - Agricultural Sciences Teachers, Postsecondary - Teach courses pertaining to agricultural sciences. Include teachers of agronomy, dairy sciences, fisheries management, forestry, horticultural sciences, poultry sciences, range management, and soil conservation.

31202 - Life Sciences Teachers, Postsecondary - Teach courses in biological sciences. Include teachers of biochemistry, biophysics, botany, and zoology. Exclude teachers of Agricultural Sciences. Exclude Health Diagnostics and Health Treatment Teachers.

31204 - Chemistry Teachers, Postsecondary - Teach courses in chemistry. Include teachers of analytical, inorganic, and organic chemistry.

31206 - Physics Teachers, Postsecondary - Teach courses in physics.

31209 - All Other Physical Sciences Teachers, Postsecondary - Teach courses in the physical sciences, except chemistry and physics. Include teachers of subjects such as astronomy, atmospheric sciences, space sciences, and geology.

31211 - Health Diagnostics Teachers, Postsecondary - Teach courses required for medical degrees that are necessary to practice as chiropractors, dentists, optometrists, physicians, podiatrists, veterinarians, or similar practitioners.

31212 - Health Assessment and Treatment Teachers, Postsecondary - Teach courses required for degrees needed by health specialists, technicians, and technologists working as nutritionists, occupational therapists, pharmacists, physical therapists, physician assistants, respiratory therapists, or in similar occupations. Exclude Nursing Instructors.

31213 - Communications Teachers, Postsecondary - Teach courses in communications, such as: organizational communications, public relations, and radio/television broadcasting. Include teachers of journalism.

31214 - English Language and Literature Teachers, Postsecondary - Teach courses in English language and literature. Include teachers of linguistics, and of comparative literature taught in English.

31215 - Foreign Language and Literature Teachers, Postsecondary - Teach courses in foreign (i.e., other than English) languages and literature.

31218 - Art, Drama, and Music Teachers, Postsecondary - Teach courses in visual and performing arts, such as: cinema, dance, drama, music, painting, sculpture, and theater.

31222 - Engineering Teachers, Postsecondary - Teach courses in engineering. Include teachers of engineering specialties such as: aerospace, chemical, civil, electrical, industrial, mechanical, mineral, nuclear, and petroleum engineering.

31223 - Architecture Teachers, Postsecondary - Teach courses in architecture and architectural design, such as: architectural environmental design, interior architecture/design, and landscape architecture.

31224 - Mathematical Sciences Teachers, Postsecondary - Teach courses in mathematics, applied mathematics, statistics, and actuarial science.

31226 - Computer Science Teachers, Postsecondary - Teach courses in computer and information science, including computer engineering, computer programming, and information systems theory.

31231 - Anthropology and Sociology Teachers, Postsecondary - Teach courses in anthropology and sociology.

31232 - Area, Ethnic, and Cultural Studies Teachers, Postsecondary - Teach courses pertaining to the culture and development of an area (e.g., Latin America), an ethnic group, or any other group (e.g., women's studies, urban affairs).

31233 - Economics Teachers, Postsecondary - Teach courses in economics.

31234 - Geography Teachers, Postsecondary - Teach courses in geography.

31235 - History Teachers, Postsecondary - Teach courses in human history and historiography.

31236 - Political Science Teachers, Postsecondary - Teach courses in political science, international affairs, and international relations.

31237 - Psychology Teachers, Postsecondary - Teach courses in psychology, such as: child, clinical, and developmental psychology, and psychological counseling.

31239 - All Other Social Sciences Teachers, Postsecondary - Teach courses in social sciences not classified separately above.

31242 - Business Teachers, Postsecondary - Teach courses in business administration and management, such as: accounting, finance, human resources, labor relations, marketing, and operations research.

31244 - Law Teachers, Postsecondary - Teach courses in law.

31246 - Criminal Justice and Law Enforcement Teachers, Postsecondary - Teach courses in criminal justice, corrections, and law enforcement administration.

31247 - Social Work Teachers, Postsecondary - Teach courses in social work.

31252 - Education Teachers, Postsecondary - Teach courses pertaining to education, such as: counseling, curriculum, guidance, instruction, teacher education, and teaching English as a second language.

31254 - Philosophy and Religion Teachers, Postsecondary - Teach courses in philosophy, religion, and theology.

31256 - Library Science Teachers, Postsecondary - Teach courses in library science.

31258 - Parks, Recreation, Leisure, and Fitness Studies Teachers, Postsecondary - Teach courses pertaining to recreation, leisure, and fitness studies, including: exercise physiology, facilities management, natural resources conservation, and wildlife/wetlands management.

31262 - Home Economics Teachers, Postsecondary - Teach courses in child care, family relations, finance, nutrition, and related subjects as pertaining to home management.

31299 - All Other Postsecondary Teachers - All other postsecondary teachers not elsewhere classified.

Other Teachers and Instructors

31303 - Teachers, Preschool - Instruct children (normally up to 5 years of age) in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. May be required to hold state certification.

31304 - Teachers, Kindergarten - Teach elemental natural and social science, personal hygiene, music, art, and literature to children from 4 to 6 years old. Promote physical, mental, and social development. May be required to hold state certification.

31305 - Teachers, Elementary School - Teach elementary pupils in public or private schools basic academic, social, and other formative skills. Exclude special education teachers of the handicapped.

31308 - Teachers, Secondary School - Instruct students in public or private schools in one or more subjects, such as English, mathematics, or social studies. May be designated according to subject matter specialty, such as Typing Instructors, Commercial Teachers, or English Teachers. Include vocational high school teachers.

31311 - Teachers, Special Education - Teach elementary and secondary school subjects to educationally and physically handicapped students. Include teachers who specialize and work with audibly and visually handicapped students and those who teach basic academic and life processes skills to the mentally retarded.

31314 - Teachers and Instructors, Vocational Education and Training - Teach or instruct vocational and/or occupational subjects at the post-secondary level (but at less than the baccalaureate) to students who have graduated or left high school. Subjects include business, secretarial science, data processing, trades, and practical nursing. Include correspondence school instructors, industrial, commercial and government training instructors, and adult education teachers and instructors who prepare persons to operate industrial machinery and equipment and transportation and communications equipment. Teaching may take place in public or private schools whose primary business is education or in a school associated with an organization whose primary business is other than education.

31317 - Instructors, Nonvocational Education - Teach or instruct out-of-school youths and adults in courses other than those that normally lead to an occupational objective and are less than the baccalaureate level. Subjects may include self-improvement and nonvocational courses such as Americanization, basic education, art, drama, music, bridge, homemaking, stock market analysis, languages, modeling, flying, dancing, and automobile driving. Teaching may take place in public or private schools or in an organization whose primary business is other than education.

31321 - Instructors and Coaches, Sports and Physical Training - Instruct or coach groups or individuals in the fundamentals of sports. Demonstrate techniques and methods of participation. Observe and inform participants of corrective measures necessary to improve their skills. Those required to hold teaching degrees should be reported in the appropriate teaching category.

31323 - Farm and Home Management Advisors - Advise, instruct, and assist individuals and families engaged in agriculture, agricultural related processes, or home economics activities. Demonstrate procedures and apply research findings to solve problems; instruct and train in product development, sales, and the utilization of machinery and equipment to promote general welfare. Include County Agricultural Agents, Feed and Farm Management Advisers, Home Economists, and Extension Service Advisers.

31399 - All Other Teachers and Instructors - All other teachers and instructors not classified separately above.

Librarians, Archivists, Curators, and Other Education Related Occupations

31502 - Librarians, Professional - Administer libraries and perform related library services. Includes selecting, acquiring, cataloging, classifying, circulating, and maintaining library materials; furnishing reference, bibliographical, and reader's advisory services. May select music, films, or other audiovisual material for programs.

31505 - Technical Assistants, Library - Assist librarians by furnishing information on library sciences, facilities, and rules; by assisting readers in the use of card catalogs and indexes to locate books and other materials; and by answering questions that require only brief consultation of standard reference. May catalog books or train and supervise clerical staff.

31508 - Audio-Visual Specialists - Plan and prepare audio-visual teaching aids and methods for use in education.

31511 - Curators, Archivists, Museum Technicians, and Conservators - Curators: Administer affairs of museum and conduct scientific research programs. Direct instructional, research, and public service activities of institution. Archivists: Appraise, edit, and direct safekeeping of permanent records and historically valuable documents. Participate in research activities based on archival materials. Museum Technicians and Conservators: Prepare specimens such as fossils, skeletal parts, lace, and textiles for museum collection and exhibits. May restore documents or install, arrange, and exhibit materials.

31514 - Vocational and Educational Counselors - Counsel individuals and provide group educational and vocational guidance services.

31517 - Instructional Coordinators - Develop instructional material, coordinate educational content, and incorporate current technology in specialized fields that provide guidelines to educators and instructors for developing curricula and conducting courses. Include Educational Consultants and Specialists, Public Health Educators, and Instructional Material Directors.

31521 - Teacher Aides, Paraprofessional - Perform duties that are instructional in nature or deliver direct services to students and/or parents. Serve in a position for which a teacher or another professional has ultimate responsibility for the design and implementation of educational programs and services.

Health Practitioners, Technologists, Technicians, and Related Health Occupations

Health Diagnosing and Treating Practitioners

32102 - Physicians and Surgeons - Doctors of medicine who diagnose and treat mental or physical disorders. May specialize in one field such as surgery, obstetrics, or psychiatry.

32105 - Dentists - Diagnose and treat diseases, injuries, and malformations of teeth, gums, and related oral structures.

32108 - Optometrists - Diagnose, manage, and treat conditions and diseases of the human eye and visual system. Examine eyes to determine visual efficiency and performance by use of instruments and observation. Prescribe corrective procedures.

32111 - Podiatrists - Diagnose and treat diseases and deformities of the human foot.

32113 - Chiropractors - Adjust spinal column and other articulations of the body to prevent disease and correct abnormalities of the human body believed to be caused by interference with the nervous system. Examine patient to determine nature and extent of disorder. Manipulate spine or other involved area. May utilize supplementary measures such as exercise, rest, water, light, heat, and nutritional therapy.

32114 - Veterinarians and Veterinary Inspectors - Diagnose and treat diseases and dysfunction of animals. May engage in a particular function such as research and development, consultation, administration, technical writing, sale or production of commercial products, or rendering of technical services to commercial firms or other organizations. Include Veterinary Inspectors.

32199 - All Other Health Diagnosing and Treating Practitioners - All other health diagnosing and treating practitioners not classified separately above.

Therapists

32302 - Respiratory Therapists - Provide assessment, diagnostic evaluation, treatment, and care for patients with breathing disorders. Assume primary responsibility for all respiratory care modalities, including the supervision of respiratory therapy technicians. Initiate and conduct therapeutic procedures; maintain patient records; and select, assemble, check, and operate equipment.

32305 - Occupational Therapists - Plan, organize, and participate in medically oriented occupational programs in hospital or similar institution to rehabilitate patients who are physically or mentally ill.

32308 - Physical Therapists - Assess, plan, organize, and participate in rehabilitative programs that improve mobility, relieve pain, increase strength, and decrease or prevent deformity of patients suffering from disease or injury.

32314 - Speech-Language Pathologists and Audiologists - Examine and provide remedial services for persons with speech and hearing disorders. Perform research related to speech and language problems.

32317 - Recreational Therapists - Plan, organize, and direct medically approved recreation programs for patients in hospitals, nursing homes, or other institutions. Activities include sports, trips, dramatics, social activities, and arts and crafts.

32399 - All Other Therapists - All other therapists not classified separately above.

Health Care Maintenance and Treating Occupations

32502 - Registered Nurses - Administer nursing care to ill or injured persons. Licensing or registration required. Include administrative, public health, industrial, private duty, and surgical nurses.

32505 - Licensed Practical Nurses - Care for ill, injured, convalescent, and handicapped persons in hospitals, clinics, private homes, sanitariums, and similar institutions.

32508 - Emergency Medical Technicians - Administer first aid treatment and transport sick or injured persons to medical facility, working as a member of an emergency medical team.

32511 - Physician's Assistants - Provide patient services under direct supervision and responsibility of doctor of medicine or osteopathy. Elicit detailed patient histories and make complete physical examinations. Reach tentative diagnosis and order appropriate laboratory tests. Require substantial educational preparation, usually at junior or 4-year colleges. Most physician assistants complete 2 years of formal training, but training may vary from 1 to 5 years depending on the nature of the training and previous education and experience. May require certification. Exclude Ambulance Attendants, whose training is limited to the application of first aid, and Nurses.

32514 - Opticians, Dispensing and Measuring - Design, measure, fit, and adapt lenses and frames for client according to written optical prescription or specification. Assist client with selecting frames. Measure customer for size of eyeglasses and coordinate frames with facial and eye measurements and optical prescription. Prepare work order for optical laboratory containing instructions for grinding and mounting lenses in frames. Verify exactness of finished lens spectacles. Adjust frame and lens position to fit client. May shape or reshape frames. Include Contact Lens Opticians.

32517 - Pharmacists - Compound and dispense medications following prescriptions issued by physicians, dentists, or other authorized medical practitioners.

32518 - Pharmacy Technicians - Fill orders for unit doses and prepackaged pharmaceuticals and perform other related duties under the supervision and direction of a pharmacy supervisor or staff pharmacist. Duties include keeping records of drugs delivered to the pharmacy, storing incoming merchandise in proper locations, and informing the supervisor of stock needs and shortages. May clean equipment used in the performance of duties and assist in the care and maintenance of equipment and supplies.

32521 - Dietitians and Nutritionists - Organize, plan, and conduct food service or nutritional programs to assist in promotion of health and control of disease. May administer activities of department providing quantity food service. May plan, organize, and conduct programs in nutritional research.

32523 - Dietetic Technicians - Under direct supervision of Dietitians, or following established nutritional guidelines, advise on food or nutrition.

Other Health Professionals, Paraprofessionals, and Technicians

32902 - Medical and Clinical Laboratory Technologists - Perform a wide range of complex procedures in the general area of the clinical laboratory or perform specialized procedures in such areas as cytology, histology, and microbiology. Duties may include supervising and coordinating activities of workers engaged in laboratory testing. Include workers who teach medical technology when teaching is not their primary activity.

32905 - Medical and Clinical Laboratory Technicians - Perform routine tests in medical laboratory for use in treatment and diagnosis of disease. Prepare vaccines, biologicals, and serums for prevention of disease. Prepare tissue samples for Pathologists, take blood samples, and execute such laboratory tests as urinalysis and blood counts. May work under the general supervision of a Medical Laboratory Technologist.

32908 - Dental Hygienists - Perform dental prophylactic treatments and instruct groups and individuals in the care of the teeth and mouth.

32911 - Medical Records Technicians - Compile and maintain medical records of hospital and clinic patients.

32913 - Radiation Therapists - Provide radiation therapy to patients as prescribed by a radiologist according to established practices and standards. Duties may include reviewing prescription and diagnosis; acting as liaison with physician and supportive care personnel; preparing equipment, such as immobilization, treatment, and protection devices; and maintaining records, reports, and files. May assist in dosimetry procedures and tumor localization.

32914 - Nuclear Medicine Technologists - Prepare, administer, and measure radioactive isotopes in therapeutic, diagnostic, and tracer studies utilizing a variety of radioisotope equipment. Prepare stock solutions of radioactive materials and calculate doses to be administered by Radiologists. Subject patients to radiation. Execute blood volume, red cell survival, and fat absorption studies following standard laboratory techniques.

32919 - Radiologic Technologists - Take X-rays and CAT scans or administer nonradioactive materials into patient's bloodstream for diagnostic purposes. Include technologists who specialize in other modalities such as computed tomography, ultrasound, and magnetic resonance. Include workers whose primary duties are to demonstrate portions of the human body on X-ray film or fluoroscopic screen.

32923 - Electroneurodiagnostic Technologists - Record electrical activity of the brain and other nervous system functions using a variety of techniques and equipment. May prepare patients for tests, obtain medical histories, calculate results, and maintain equipment.

32925 - Cardiology Technologists - Conduct tests on pulmonary and/or cardiovascular systems of patients for diagnostic purposes. May conduct or assist in electrocardiograms, cardiac catheterizations, and pulmonary-function, lung capacity and similar tests.

32926 - Electrocardiograph Technicians - Record electromotive variations in heart muscle using electrocardiograph, to provide data for diagnosis of heart ailments.

32928 - Surgical Technologists and Technicians - Perform any combination of the following tasks either before, during, or after an operation: Prepare patient by washing, shaving, etc.; place equipment and supplies in operating room according to surgeon's instruction; arrange

instruments under direction of nurse; maintain specified supply of fluids for use during operation; adjust lights and equipment as directed; hand instruments and supplies to surgeon, hold retractors, and cut sutures as directed; count sponges, needles, and instruments used during operation; and clean operating room.

32931 - Psychiatric Technicians - Provide nursing care to mentally ill, emotionally disturbed, or mentally retarded patients. Participate in rehabilitation and treatment programs. Help with personal hygiene. Administer oral medications and hypodermic injections, following physician's prescriptions and hospital procedures. Monitor patient's physical and emotional well-being and report to medical staff.

32951 - Veterinary Technicians and Technologists - Perform medical tests in a laboratory environment for use in the treatment and diagnosis of diseases in animals. Prepare vaccines and serums for prevention of diseases. Prepare tissue samples, take blood samples, and execute laboratory tests such as urinalysis and blood counts. Clean and sterilize instruments and materials and maintain equipment and machines.

32999 - All Other Health Professionals, Paraprofessionals, and Technicians - All other health professionals, paraprofessionals, and technicians not classified separately above.

Writers, Artists, Entertainers, Athletes, and Related Occupations

34002 - Writers and Editors - Writers: Originate and prepare written material such as scripts, stories, news items, advertisements, and other material. Editors: Coordinate, edit, and analyze prepared written material. Include Managing Editors. Exclude Publicity Writers, Public Relations Specialists, Technical Writers, and Technical Editors.

34005 - Technical Writers and Editors - Write or edit technical materials, such as equipment manuals, appendices, and operating and maintenance instructions. May oversee preparation of illustrations, photographs, diagrams, and charts; and assist in layout work.

34008 - Public Relations Specialists and Publicity Writers - Engage in promoting or creating goodwill for individuals, groups, or organizations by writing or selecting favorable publicity material and releasing it through various communications media. Prepare and arrange displays, make speeches, and perform related publicity efforts.

34011 - Reporters and Correspondents - Collect and analyze facts about newsworthy events by interview, investigation, or observation. Report and write stories for newspaper, news magazine, radio, or television. Exclude correspondents who broadcast news for radio and television.

34014 - Broadcast News Analysts - Analyze, interpret, and broadcast news received from various sources.

34017 - Announcers, Radio and Television - Introduce various types of radio or television programs, interview or question guests, or act as master of ceremonies. Read news flashes and identify station by giving call letters.

34023 - Photographers - Photograph persons, subjects, merchandise, or other commercial products. May develop negatives and produce finished prints. Include Scientific Photographers, Aerial Photographers, and Photojournalists.

34026 - Camera Operators, Television and Motion Picture - Operate television or motion picture camera to photograph scenes for TV broadcasts, advertising, or motion pictures.

34028 - Broadcast Technicians - Set up, operate, and maintain the electronic equipment used to transmit radio and television programs. Control audio equipment to regulate volume level and quality of sound during radio and television broadcasts. Operate radio transmitter to broadcast radio and television programs. An FCC first class operator's license is usually required for this occupation. A few typical broadcast technician workers include: Audio Operators, Video Operators, Control Room Technicians, Transmitter Operators, Master-Control Engineers, Telecine Operators.

34032 - Film Editors - Edit motion picture film, video tape, and sound tracks.

34035 - Artists and Related Workers - Design and execute artwork to illustrate subject matter; promote public consumption of materials, products, or services; or to influence others in their opinions of individuals or organizations. Include Graphic Designers, Commercial Artists, Artistic Painters, Art Directors, and Painting Restorers.

34038 - Designers, Except Interior Designers - Design or arrange objects and materials to achieve artistic or decorative effects for apparel or other commercial items. May also create, mark out, or draw designs for items such as furniture and machinery (product design). Designers are generally categorized according to articles or products designed, such as Clothes Designers, Industrial Designers, or according to type of design work, such as Embroidery Designers. Include Layout Artists.

34041 - Interior Designers - Plan, design, and furnish interiors of residential, commercial, or industrial buildings. Formulate design which is practical, aesthetic and conducive to intended purposes, such as raising productivity, selling merchandise, or improving life style. May specialize in a particular field, style, or phase of interior design. Exclude Merchandise Display Designers.

34044 - Merchandise Displayers and Window Trimmers - Plan and erect commercial displays, such as those in windows and interiors of retail stores and at trade exhibitions.

34047 - Music Directors, Singers, Composers, and Related Workers - Conduct, direct, plan, and lead instrumental or vocal performances by musical groups, such as orchestras, choirs, and glee clubs. Include workers who entertain by singing songs on stage, radio, television, or in motion pictures. Include Arrangers, Composers, and Orchestrators.

34051 - Musicians, Instrumental - Play one or more musical instruments in recital, in accompaniment, or as members of an orchestra, band, or other musical group.

34053 - Dancers and Choreographers - Dancers: Perform dances solo, with partners, or in groups to entertain audience. May also sing or act. Choreographers: Create and teach original dance for ballet, musical, or review. May direct and stage presentations.

34056 - Producers, Directors, Actors, and other Entertainers - Produce, direct, or play parts in stage, television, radio, or motion picture productions for entertainment, information, or instruction.

34058 - Athletes, Coaches, Umpires, and Related Workers - Participate in competitive professional athletic events as a player, coach, manager, umpire, or judge. Include Athletic Trainers, Scouts, Official Scorers, and Timekeepers.

Other Professional, Paraprofessional, and Technical Occupations

39002 - Airplane Dispatchers and Air Traffic Controllers - Control air traffic on and within vicinity of airport and movement of air traffic between altitude sectors and control centers according to established procedures and policies. Authorize, regulate, and control commercial airline flights according to government or company regulations to expedite and insure flight safety.

39005 - Traffic Technicians - Conduct field studies to determine traffic volume, speed, effectiveness of signals, adequacy of lighting, and other factors influencing traffic conditions, under direction of traffic engineer.

39008 - Radio Operators - Receive and transmit communications using radiotelegraph or radiotelephone equipment in accordance with government regulations. May repair equipment.

39011 - Funeral Directors and Morticians - Perform various tasks to arrange and direct funeral services, such as coordinating transportation of body to mortuary for embalming, interviewing family or other authorized person to arrange details, selecting pallbearers, procuring official for religious rites, and providing transportation for mourners. Exclude top and middle managers whose duties are primarily policy making, planning, and administrative in nature and report them as General Managers or in another appropriate managerial occupation.

39014 - Embalmers - Prepare bodies for interment in conformity with legal requirements.

39999 - All Other Professional, Paraprofessional, and Technical Workers - All other professional, paraprofessional, and technical workers not classified separately above.

First-Line Supervisors and Manager/Supervisors

41002 - First-Line Supervisors and Managers/Supervisors - Sales and Related Workers - Directly supervise and coordinate activities of marketing, sales, and related workers. May perform management functions, such as budgeting, accounting, marketing, and personnel work, in addition to their supervisory duties.

Sales Occupations, Services

43002 - Sales Agents and Placers, Insurance - Sell life, endowments, fire, accident, and other types of insurance. May refer clients to independent brokers, work as independent broker, or be employed by an insurance company.

43005 - Brokers, Real Estate - Sell real estate, rent and manage properties, and arrange for loans while managing and operating real estate office.

43008 - Sales Agents, Real Estate - Rent, buy, and sell property to clients. Perform duties such as studying property listings, interviewing prospective clients, accompanying clients to property site, discussing conditions of sale, and drawing up real estate contracts.

43011 - Appraisers, Real Estate - Appraise real property to determine its value for purchase, sales, investment, mortgage, or loan purposes.

43014 - Sales Agents, Securities, Commodities, and Financial Services - Buy and sell securities in investment and trading firms, or call upon businesses and individuals to sell financial services. Provide financial services, such as loan, tax, and securities counseling. May advise securities customers about such things as stocks, bonds, and market conditions.

43017 - Sales Agents, Selected Business Services - Sell selected services, such as building maintenance, credit reporting, bookkeeping, security, printing, and storage space, to businesses. Exclude advertising, insurance, financial, and real estate sales agents.

43021 - Travel Agents - Plan trips for travel agency customers. Duties include determining destination, modes of transportation, travel dates, costs, accommodations required, and planning, describing, or selling itinerary package tours. May specialize in foreign or domestic service, individual or group travel, specific geographical area, airplane charters, or package tours.

43023 - Sales Agents, Advertising - Sell or solicit advertising. Sell things such as graphic art, advertising space in publications, custom-made signs, or TV and radio advertising time. May obtain leases for outdoor advertising sites or persuade retailer to use sales promotion display items.

43099 - All Other Sales Representatives and Salespersons, Services - All other services sales representatives and salespersons not classified separately above.

Merchandise, Products, and Other Sales and Sales-Related Occupations

49002 - Sales Engineers - Sell business goods or services that require a technical background equivalent to a baccalaureate degree in engineering. Exclude Engineers whose primary function is not marketing or sales.

49005 - Sales Representatives, Scientific and Related Products and Services, Except Retail - Sell goods or services requiring scientific or similar knowledge in such areas as biology, engineering, chemistry, and electronics, normally obtained from 2 or 3 years of postsecondary education or its equivalent. Sell products such as aircraft, agricultural equipment and supplies, industrial machinery, medical supplies, electronic equipment, chemicals, and precision instruments. Exclude Sales Engineers whose background or equivalent knowledge is equal to a baccalaureate degree in engineering.

49008 - Sales Representatives, Except Retail and Scientific and Related Products and Services - Sell goods or services for wholesalers or manufacturers to businesses or groups of individuals. Solicit orders from established clients or secure new customers. Work requires substantial knowledge of items sold.

49011 - Salespersons, Retail - Sell to the public any of a wide variety of merchandise, such as furniture, motor vehicles, appliances, or apparel. Include workers who sell less expensive merchandise where knowledge of the item sold is not a primary requirement. Exclude Cashiers.

49014 - Salespersons, Parts - Sell spare and replaceable parts and equipment from behind counter in agency, repair shop, or parts store. Determine make, year, and type of part needed by observing damaged part or listening to a description of malfunction. Read catalogue to find stock number, price, etc., and fill customer's order from stock. Exclude workers whose primary responsibilities are to receive, store, and issue materials, equipment, and other items from stockroom.

49017 - Counter and Rental Clerks - Receive orders for services, such as rentals, repairs, dry-cleaning, and storage. May compute cost and accept payment.

49021 - Stock Clerks, Sales Floor - Receive, store, and issue sales floor merchandise. Stock shelves, racks, cases, bins, and tables with merchandise and arrange merchandise displays to attract customers. May periodically take physical count of stock or check and mark merchandise.

49023 - Cashiers - Receive and disburse money in establishments other than financial institutions. Usually involves use of adding machines, cash registers, or change makers. May also include processing credit card transactions.

49026 - Telemarketers, Door-To-Door Sales Workers, News and Street Vendors, and Other Related Workers - Solicit orders for goods or services over the telephone; sell goods or services door-to-door or on the street.

49034 - Demonstrators and Promoters - Demonstrate merchandise and answer questions for the purpose of creating public interest in buying the product. May sell demonstrated merchandise.

49999 - All Other Sales and Related Workers - All other sales and related workers not classified separately above.

First-Line Supervisors and Manager/Supervisors

51002 - First-Line Supervisors and Managers/Supervisors - Clerical and Administrative Support Workers - Directly supervise and coordinate activities of clerical and administrative support workers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same clerical work as the workers they supervise.

Industry Specific Clerical and Administrative Support Occupations

Banking, Security, Finance, and Credit Occupations

53102 - Tellers - Receive and pay out money. Keep records of money and negotiable instruments involved in a financial institution's various transactions.

53105 - New Accounts Clerks - Interview persons desiring to open bank accounts. Explain banking services available to prospective customers and assist them in preparing application form.

53108 - Transit Clerks - Sort, record, prove, and prepare transit items for mailing to or from out-of-city banks to insure correct routing and prompt collection.

53111 - Loan Interviewers - Interview loan applicants to elicit information; investigate applicants' background and verify references; prepare loan request papers; forward findings, reports, and documents to appraisal department.

53114 - Credit Authorizers - Authorize credit charges against customers' accounts.

53117 - Credit Checkers - Investigate history and credit standing of individuals or business establishments applying for credit. Telephone or write to credit departments of business and service establishments to obtain information about applicant's credit standing.

53121 - Loan and Credit Clerks - Assemble documents, prepare papers, process applications, and complete transactions of individuals applying for loans and credit. Loan Clerks: Review loan papers to insure completeness; operate typewriters, word processors, or personal computers to prepare correspondence, reports, and loan documents from draft; and complete transactions between loan establishment, borrowers, and sellers upon approval of loan. Credit Clerks: Interview applicants to obtain personal and financial data; determine credit worthiness; process applications; and notify customer of acceptance or rejection of credit. Exclude Loan Interviewers.

53123 - Adjustment Clerks - Investigate and resolve customers' inquiries concerning merchandise, service, billing, or credit rating. Examine pertinent information to determine accuracy of customers' complaints and responsibility for errors. Notify customers and appropriate personnel of findings, adjustments, and recommendations, such as exchange of merchandise, refund of money, credit to customers' accounts, or adjustment to customers' bills.

53126 - Statement Clerks - Prepare and distribute bank statements to customers, answer inquiries, and reconcile discrepancies in records and accounts.

53128 - Brokerage Clerks - Perform clerical duties involving the purchase or sale of securities. Duties include writing orders for stock purchases and sales, computing transfer taxes, verifying stock transactions, accepting and delivering securities, informing customers of stock price fluctuations, computing equity, distributing dividends, and keeping records of daily transactions and holdings.

Insurance Occupations

53302 - Insurance Adjusters, Examiners, and Investigators - Investigate, analyze, and determine the extent of insurance company's liability concerning personal, casualty, or property loss or damages, and attempt to effect settlement with claimants. Correspond with or interview medical specialists, agents, witnesses, or claimants to compile information. Calculate benefit payments and approve payment of claims within a certain monetary limit. Exclude Insurance Sales Agents, Insurance Policy Process Clerks, and Claims Clerks.

53305 - Insurance Appraisers, Auto Damage - Appraise automobile or other vehicle damage to determine cost of repair for insurance claim settlement and seek agreement with automotive repair shop on cost of repair. Prepare insurance forms to indicate repair cost or cost estimates and recommendations.

53308 - Insurance Examining Clerks - Examine life insurance policies held as security for commercial or personal credit loans. Keep records of bank-owned insurance and fire insurance on commodity loans.

53311 - Insurance Claims Clerks - Obtain information from insured or designated persons for purpose of settling claim with insurance carrier.

53314 - Insurance Policy Processing Clerks - Process applications for, changes to, reinstatement of, and cancellation of insurance policies. Duties include reviewing insurance applications to insure that all questions have been answered, compiling data on insurance policy changes, changing policy records to conform to insured party's specifications, compiling data on lapsed insurance policies to determine automatic reinstatement according to company policies, canceling insurance policies as requested by agents, and verifying the accuracy of insurance company records. Exclude Insurance Claims Clerks and Banking Insurance Clerks.

Investigative and Related Occupations, Except Insurance

53502 - Welfare Eligibility Workers and Interviewers - Interview and investigate applicants and recipients to determine eligibility for use of social programs and agency resources. Duties include recording and evaluating personal and financial data obtained from individuals; initiating procedures to grant, modify, deny, or terminate eligibility for various aid programs; authorizing grant amounts; and preparing reports. These workers generally receive specialized training and assist Social Service Caseworkers.

53505 - Investigators, Clerical - Contact persons or businesses by telephone to verify employment records, health history, and moral and social behavior. Examine city directories and public records. Write reports on findings and recommendations. Exclude Insurance, Credit, and Welfare Investigators.

53508 - Bill and Account Collectors - Locate and notify customers of delinquent accounts by mail, telephone, or personal visit to solicit payment. Duties include receiving payment and posting amount to customers' account; preparing statements to credit department if customer fails to respond; initiating repossession proceedings or service disconnection; keeping records of collection and status of accounts. Exclude workers who collect money from coin boxes.

Municipal and Related Occupations

53702 - Court Clerks - Perform clerical duties in court of law; prepare docket of cases to be called; secure information for judges; and contact witnesses, attorneys, and litigants to obtain information for court.

53705 - Municipal Clerks - Draft agendas and bylaws for town or city council; record minutes of council meetings; answer official correspondence; keep fiscal records and accounts; and prepare reports on civic needs.

53708 - License Clerks - Issue licenses or permits to qualified applicants. Obtain necessary information; record data; advise applicants on requirements; collect fees; and issue licenses. May conduct oral, written, visual, or performance testing.

Lodging and Travel Occupations

53802 - Travel Clerks - Provide tourists with travel information, such as points of interest, restaurants, rates, and emergency service. Duties include answering inquiries, offering suggestions, and providing literature pertaining to trips, excursions, sporting events, concerts and plays. May make reservations, deliver tickets, arrange for visas, or contact individuals and groups to inform them of package tours. Exclude Travel Agents.

53805 - Reservation and Transportation Ticket Agents - Make and confirm reservations for passengers and sell tickets for transportation agencies such as airlines, bus companies, railroads, and steamship lines. May check baggage and direct passengers to designated concourse, pier, or track. Exclude workers selling tickets for subways, city buses, ferryboats, and street railways.

53808 - Hotel Desk Clerks - Accommodate hotel patrons by registering and assigning rooms to guests, issuing room keys, transmitting and receiving messages, keeping records of occupied rooms and guests' accounts, making and confirming reservations, and presenting statements to and collecting payments from departing guests.

Other Industry Specific Occupations

53902 - Library Assistants and Bookmobile Drivers - Library Assistants: Compile records; sort and shelve books; issue and receive library materials, such as books, pictures, cards, slides, audio and video recordings, and microfilm. Locate library materials for loan and replace materials in shelving area (stacks) or files according to identification number and title. Register patrons to permit them to borrow books, periodicals, and other library materials. Bookmobile Drivers: Operate a bookmobile or light truck that pulls a book trailer to specific locations on a predetermined schedule and assist with providing services in mobile library.

53905 - Teacher Aides and Educational Assistants, Clerical - Arrange work materials, supervise students at play, and operate audiovisual equipment under guidance of a teacher.

53908 - Advertising Clerks - Receive orders for classified advertising in a newspaper or magazine from customers in person or by telephone. Examine and mark classified advertisements according to copy sheet specifications to guide composing room in assembling type. Verify conformance of published advertisements to specifications for billing purposes.

53911 - Proofreaders and Copy Markers - Read transcript or proof type setup to detect and mark for correction any grammatical, typographical, or compositional errors. Exclude workers whose primary duty is editing copy. Include proofreaders of Braille.

53914 - Real Estate Clerks - Perform duties concerned with rental, sale, and management of real estate, such as typing copies of listings, computing interest or penalty owed, holding collateral in escrow, and checking due notices on taxes and renewal dates of insurance and mortgage loans.

Secretarial and General Office Occupations

Secretaries

55102 - Legal Secretaries - Prepare legal papers and correspondence, such as summonses, complaints, motions, and subpoenas. May review law journals and other legal publications to identify court decisions pertinent to pending cases and submit articles to company officials. Must be familiar with legal terminology, procedures, and documents, as well as legal research.

55105 - Medical Secretaries - Perform secretarial duties utilizing specific knowledge of medical terminology and hospital, clinic, or laboratory procedures. Duties include taking dictation; and compiling and recording medical charts, reports, and correspondence using a typewriter, word processor, or personal computer. Duties may also include preparing and sending bills to patients or recording appointments.

55108 - Secretaries, Except Legal and Medical - Relieve officials of clerical work and minor administrative and business details by scheduling appointments, giving information to callers, taking dictation, composing and typing routine correspondence (using typewriter or word processor), reading and routing incoming mail, filing correspondence and other records, and other assigned clerical duties.

Other Secretarial Related and General Office Occupations

55302 - Stenographers and/or Court Reporters - Use shorthand or speedwriting notes to take dictation, record correspondence, reports, court testimony, examinations, instructions, or other material and transcribes the recorded material.

55305 - Receptionists and Information Clerks - Answer inquiries and obtain information for general public (e.g., customers, visitors, and other interested parties). Provide information regarding activities conducted at establishment: location of departments, offices, and employees within organization; or services in a hotel. May perform other clerical duties as assigned. Exclude Receptionists who operate switchboards.

55307 - Typists, Including Word Processing - Use typewriter or word processing equipment to type letters, reports, forms, or other straight copy material from rough draft, corrected copy, or voice recording. May perform other clerical duties as assigned. Exclude Key punchers, Secretaries, and Stenographers.

55314 - Personnel Clerks, Except Payroll and Timekeeping - Compile and keep personnel records. Record data for each employee, such as address, weekly earnings, absences, amount of sales or production, supervisory reports on ability, and date of and reason for termination. Compile and type reports from employment records. File employment records. Search employee files and furnish information to authorized persons.

55317 - Correspondence Clerks - Compose letters in reply to requests for merchandise, damage claims, credit and other information, delinquent accounts, incorrect billings, or unsatisfactory services. Duties may include gathering data to formulate reply and typing correspondence.

55321 - File Clerks - File correspondence, cards, invoices, receipts, and other records in alphabetical or numerical order or according to the filing system used. Locate and remove material from file when requested. May be required to classify and file new material.

55323 - Order Clerks, Materials, Merchandise, and Service - Receive and process incoming orders for materials, merchandise, or services such as repairs, installations, or rental of facilities. Duties include informing customers of order receipt, prices, shipping dates, and delays; preparing contracts; and handling complaints. Exclude workers who dispatch as well as take orders for services.

55326 - Procurement Clerks - Compile information and records to draw up purchase orders for procurement of materials.

55328 - Statistical Clerks - Compile and compute data according to statistical formulas for use in statistical studies. May perform actuarial computations using algebra and trigonometry and compile charts and graphs for use by Actuaries. Include Actuarial Clerks.

55332 - Interviewing Clerks, Except Personnel and Social Welfare - Interview public to obtain information. Contact persons by telephone, mail, or in person for the purpose of completing forms, applications, or questionnaires. Ask specific questions, record answers, and assist persons with completing form. May sort, classify, and file forms. Exclude workers whose primary duty is processing applications.

55335 - Customer Service Representatives, Utilities - Interview applicants for water, gas, electric, or telephone service. Talk with customer by phone or in person and receive orders for installation, turn-on, discontinuance, or change in services.

55338 - Bookkeeping, Accounting, and Auditing Clerks - Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.

55341 - Payroll and Timekeeping Clerks - Compile and post employee time and payroll data. May compute time worked by employees, worker's production, commission, etc.; computes and posts wages and deductions; may prepare paychecks.

55344 - Billing, Cost, and Rate Clerks - Compile data, compute fees and charges, and prepare invoices for billing purposes. Duties include computing costs and calculating rates for goods, services, and shipment of goods; posting data; and keeping other relevant records. May involve use of typewriters, calculators, adding and bookkeeping machines, word processors, or personal computers. Exclude workers whose primary duty is operation of special office machines or workers who calculate charges for passenger transportation.

55347 - General Office Clerks - Perform duties too varied and diverse to be classified in any specific office clerical occupation. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of bookkeeping, typing, stenography, office machine operation, and filing.

Electronic Data Processing and Other Office Machine Occupations

56002 - Billing, Posting, and Calculating Machine Operators - Operate machines that automatically perform mathematical processes, such as addition, subtraction, multiplication, and division, to calculate and record billing, accounting, statistical, and other numerical data. Duties include operating special billing machines to prepare statements, bills, and invoices, and operating bookkeeping machines to copy and post data, make computations, and compile records of transactions.

56005 - Duplicating Machine Operators - Operate one of a variety of office machines such as photocopying, photographic, mimeograph, and duplicating machines to make copies. Exclude blueprinting machine operators and operators of offset printing machines and presses.

56008 - Mail Machine Operators, Preparation and Handling - Operate machines that: Emboss names, addresses, and other matter onto metal plates for use in addressing machines; print names, addresses, and similar information onto items such as envelopes, accounting forms, and advertising literature; address, fold, stuff, seal, and stamp mail; and open envelopes. Exclude workers who prepare incoming and outgoing mail for distribution by hand.

56011 - Computer Operators, Except Peripheral Equipment - Monitor and control electronic computer to process business, scientific, engineering, and other data according to operating instructions. Exclude operators who control peripheral equipment only.

56014 - Peripheral EDP Equipment Operators - Operate computer peripheral equipment, such as tape or disk drives, printers, card-to-tape or tabulating machines, sorters, or interpreters. Exclude Computer Operators and Data Entry Keyers.

56017 - Data Entry Keyers, Except Composing - Operate keyboard or other data entry devices to prepare data processing input on cards, disk, or tape. Duties include coding and verifying alphabetic or numeric data.

56021 - Data Keyers, Composing - Operate photocomposing perforator or comparable data entry composing machines (similar in operation to an electric typewriter) to prepare materials for printing or publication.

56099 - All Other Office Machine Operators - All other office machine operators not classified separately above.

Communications, Mail, and Message Distributing Occupations

Communications Equipment Operators

57102 - Switchboard Operators - Operate cord or cordless switchboard to relay incoming, outgoing, and interoffice calls. May supply information to callers and record messages. May also act as receptionist, perform routine clerical work, and type.

57111 - Telegraph and Teletype Operators - Operate telegraphic typewriter, telegraph key, facsimile machine, and related equipment to transmit and receive signals or messages. Prepare messages according to prescribed formats. Verify and correct errors in messages. May adjust equipment for proper operation.

57199 - All Other Communications Equipment Operators - All other communications equipment operators not classified separately above.

Mail and Message Distribution Occupations

57302 - Mail Clerks, Except Mail Machine Operators and Postal Service - Prepare incoming and outgoing mail for distribution. Duties include time stamping, opening, reading, sorting, and routing incoming mail; sealing, stamping, and affixing postage to outgoing mail or packages; and keeping necessary records and completed forms. Exclude workers whose primary duty is mail distribution or operation of mail-preparing and mail-handling machines.

57305 - Postal Mail Carriers - Sort mail for delivery. Deliver mail on established route by vehicle or on foot.

57308 - Postal Service Clerks - Perform any combination of tasks in a post office, such as receive letters and parcels; sell postage and revenue stamps, postal cards, and stamped envelopes; fill out and sell money orders; place mail in pigeon holes of mail rack or in bags according to State, address, or other scheme; and examine mail for correct postage.

57311 - Messengers - Run errands. Sort and deliver messages, documents, packages, and other items to offices or departments within an establishment or to other business concerns, traveling by foot, bicycle, motorcycle, automobile, or public conveyance. May use telephone to complete assigned tasks.

Material Recording, Scheduling, Dispatching, and Distributing Occupations

58002 - Dispatchers, Police, Fire, and Ambulance - Receive complaints from public concerning crimes and police emergencies. Broadcast orders to police radio patrol units in vicinity of complaint to investigate. Operate radio and telephone equipment to receive reports of fires and medical emergencies and relay information or orders to proper officials.

58005 - Dispatchers, Except Police, Fire, and Ambulance - Schedule and dispatch workers, work crews, equipment, or service vehicles for conveyance of materials, freight, or passengers or for normal installation, service, or emergency repairs rendered outside the place of business. Duties may include use of radio or telephone to transmit assignments and compiling statistics and reports on work progress.

58008 - Production, Planning, and Expediting Clerks - Coordinate and expedite the flow of work and materials within or between departments of an establishment according to production schedule. Duties, which are primarily clerical in nature, include reviewing and distributing production schedules and work orders; conferring with department supervisors to determine progress of work and completion dates; and compiling reports on progress of work and production problems. Work may also include scheduling workers and estimating costs; routing and delivering parts to insure production quotas are met; scheduling shipment of parts; keeping inventory of material in departments; insuring vendors ship merchandise on promised date; and writing special orders for services and merchandise. Exclude workers whose primary duties are weighing, measuring, and checking merchandise, supplies, and equipment. Exclude workers who engage in material expediting of a nonclerical nature.

58011 - Transportation Agents - Expedite movement of freight, mail, baggage, and passengers through airline terminals. Route inbound and outbound air freight shipments. May prepare airway bill of lading on freight and record baggage, mail, freight, weights, and number of passengers on airplane.

58014 - Meter Readers, Utilities - Read electric, gas, water, or steam consumption meters and record volume used by residential and commercial customers.

58017 - Weighers, Measurers, Checkers, and Samplers, Recordkeeping - Weigh, measure, and check materials, supplies, and equipment for the purpose of keeping relevant records. Duties are primarily clerical by nature. Include workers who collect and keep record of samples of products or materials. Exclude Production Samplers and Weighers.

58021 - Marking Clerks - Print and attach price tickets to articles of merchandise using one or several methods, such as marking price on tickets by hand or using ticket-printing machine.

58023 - Stock Clerks - Stockroom, Warehouse or Storage Yard - Receive, store, and issue materials, equipment, and other items from stockroom, warehouse, or storage yard. Keep records and compile stock reports. Exclude stockroom laborers and workers whose primary duties involve shipping, weighing, and checking.

58026 - Order Fillers, Wholesale and Retail Sales - Fill customers' mail and telephone orders from stored merchandise in accordance with specifications on sales slips or order forms. Duties may include computing prices of items, completing order receipts, keeping records of outgoing orders, and requisitioning additional materials, supplies, and equipment. Exclude Laborers, Stock Clerks, and workers whose primary duties involve weighing and checking.

58028 - Shipping, Receiving, and Traffic Clerks - Verify and keep records on incoming and outgoing shipments. Prepare items for shipment. Duties include assembling, addressing, stamping, and shipping merchandise or material; receiving, unpacking, verifying, and recording incoming merchandise or material; and arranging for the transportation of products. Exclude Laborers, Stock Clerks, and workers whose primary duties involve weighing and checking.

58099 - All Other Material Recording, Scheduling, and Distributing Workers - All other material recording, scheduling, and distributing workers not classified separately above.

Other Clerical and Administrative Support Occupations

59999 - All Other Clerical and Administrative Support Workers - All other clerical and administrative support workers not classified separately above.

First-Line Supervisors and Managers/Supervisors - Service Occupations

61002 - Fire fighting and Prevention Supervisors - Supervise and coordinate activities of workers engaged in fire fighting and fire prevention and control.

61005 - Police and Detective Supervisors - Supervise and coordinate activities of members of police force.

61008 - Housekeeping Supervisors - Supervise work activities of cleaning personnel to insure clean, orderly, and attractive rooms in hotels, hospitals, educational institutions, and similar establishments. Assign duties, inspect work, and investigate complaints regarding housekeeping service and equipment and take corrective action. May purchase housekeeping supplies and equipment, take periodic inventories, screen applicants, train new employees, and recommend dismissals.

61099 - All Other Supervisors and Managers/Supervisors - Service Workers - All other supervisors and managers/supervisors of service workers not classified separately above.

Protective Service Occupations

63002 - Fire Inspectors - Inspect buildings to detect fire hazards and enforce local ordinances and State laws. Investigate and gather facts to determine cause of fires and explosions and enforce fire laws.

63005 - Forest Fire Inspectors and Prevention Specialists - Administer fire regulations. Locate and report forest fires and weather conditions, usually from remote locations within forest or logging area. Inspect area for fire hazards and equipment for serviceability. May work from a station or patrol area.

63008 - Firefighters - Control and extinguish fires, protect life and property, and maintain equipment as paid volunteer or employee of city, township, state, or federal government.

63011 - Police Detectives - Conduct investigations to prevent or solve crimes.

63014 - Police Patrol Officers - Maintain order, enforce laws and ordinances, and protect life and property in an assigned patrol district. Perform combination of following duties: Patrol a specific area on foot or in a vehicle; direct traffic; issue traffic summonses; investigate accidents; apprehend, arrest, and process prisoners; and give evidence in court.

63017 - Correction Officers and Jailers - Guard inmates in penal or rehabilitative institution in accordance with established regulations and procedures. May guard prisoners in transit between jail, courtroom, prison, or other point, traveling by automobile or public transportation. Include Deputy Sheriffs who spend the majority of their time guarding prisoners in county correctional institutions.

63021 - Parking Enforcement Officers - Patrol assigned area such as public parking lot or section of city to issue tickets to overtime parking violators and illegally parked vehicles.

63023 - Bailiffs - Open court by announcing entrance of judge. Seat witnesses and jurors in specified areas of courtroom. Eject or arrest individuals disturbing proceedings.

63028 - Criminal Investigators, Public Service - Plan and conduct investigations related to suspected violations of federal, state, or local laws.

63032 - Sheriffs and Deputy Sheriffs - Enforce law and order in rural or unincorporated districts or serve legal processes of courts. May patrol courthouse, guard court or grand jury, or escort defendants. Exclude Deputy Sheriffs who spend the majority of their time guarding prisoners in county correctional institutions.

63035 - Detectives and Investigators, Except Public - Protect property, merchandise, and money of store or similar establishment by detecting theft, shoplifting, or other unlawful practices by public or employees. Perform necessary action to preserve order and enforce standards of decorum established by management. Include Investigators who conduct private investigations, such as obtaining confidential information, seeking missing persons, or investigating crimes and thefts.

63038 - Railroad and Transit Police and Special Agents - Protect and police railroad and transit property, employees, or passengers. Include workers who coordinate security staff.

63041 - Fish and Game Wardens - Patrol assigned area to prevent game law violations. Investigate reports of damage to crops or property by wildlife. Compile biological data.

63044 - Crossing Guards - Guide or control vehicular or pedestrian traffic at such places as street and railroad crossings and construction sites.

63047 - Guards and Watch Guards - Stand guard at entrance or patrol premises to prevent theft, violence, or infractions of rules.

63099 - All Other Protective Service Workers - All other protective service workers not classified separately above.

Food and Beverage Preparation and Service Occupations

65002 - Hosts and Hostesses, Restaurant, Lounge, or Coffee Shop - Welcome patrons, seat them at tables or in lounge, and insure quality of facilities and service.

65005 - Bartenders - Mix and serve to patrons, directly or through wait staff, alcoholic and nonalcoholic drinks following standard recipes.

65008 - Waiters and Waitresses - Serve food and/or beverages to patrons at tables. Usually take order from patron and make out check. May set table with linen and silverware and take payment from patron. May serve customers at counter as well as table. Exclude workers who only work at counters.

65011 - Food Servers, Outside - Serve food to patrons outside of a restaurant environment, such as in hotels, hospital rooms, or cars. Exclude Food Vendors.

65014 - Dining Room and Cafeteria Attendants and Bartender Helpers - Perform any combination of the following duties to facilitate food service: Carry dirty dishes from dining room to kitchen; replace soiled table linens; set tables with silverware and glassware; replenish supply of clean linens, silverware, glassware, and dishes; supply service bar with food, such as soups, salads, and desserts; and serve ice water, butter, and coffee to patrons. May wash tables.

65017 - Counter Attendants - Lunchroom, Coffee Shop, or Cafeteria - Serve food to diners at counter or from a steam table. Exclude Counter Attendants who also wait tables.

65021 - Bakers, Bread and Pastry - Mix and bake ingredients according to recipes to produce small quantities of breads, pastries, and other baked goods for consumption on premises or for sale as specialty baked goods.

65023 - Butchers and Meat Cutters - Cut, trim, and prepare carcasses and consumer-sized portions of meat for sale or for use in food service establishments. Exclude butchers working in slaughtering, meatpacking, or prepared-meat establishments.

65026 - Cooks, Restaurant - Prepare, season, and cook soups, meats, vegetables, desserts, and other foodstuffs in restaurants. May order supplies, keep records and accounts, price items on menu, or plan menu.

65028 - Cooks, Institution or Cafeteria - Prepare and cook family style meals for institutions such as schools, hospitals, or cafeterias. Usually prepare meals in large quantities rather than to individual order. May cook for employees in office building or other large facility.

65032 - Cooks, Fast Food - Prepare and cook food in a fast-food restaurant with a limited menu. Duties of the cooks are limited to preparation of a few basic items and normally involve operating large-volume, single-purpose cooking equipment.

65035 - Cooks, Short Order - Prepare and cook to order a variety of foods that require only a short preparation time. May take orders from customers and serve patrons at counters or tables. Exclude Cooks, Fast Food.

65038 - Food Preparation Workers - Perform a variety of food preparation duties, such as preparing cold foods and maintaining and cleaning kitchen work areas, equipment, and utensils. Perform simple tasks such as preparing shellfish or slicing meat. May brew coffee and tea or prepare sandwiches.

65041 - Combined Food Preparation and Service Workers - Perform duties which combine both food preparation and food service. Workers who spend more than 80 percent of their time in one job should be reported in that occupation.

65099 - All Other Food Service Workers - All other food service workers not classified separately above.

Health Service and Related Occupations

66002 - Dental Assistants - Assist dentist at chair, set up patient and equipment, keep records, and perform related duties as required.

66005 - Medical Assistants - Perform various duties under the direction of physician in examination and treatment of patients. Prepare treatment room, inventory supplies and instruments, and set up patient for attention of physician. Hand instruments and materials to physician as directed. Schedule appointments, keep medical records, and perform secretarial duties.

66008 - Nursing Aides, Orderlies, and Attendants - Work under the direction of nursing or medical staff to provide auxiliary services in the care of patients. Perform duties such as answering patient's call bell, serving and collecting food trays, and feeding patients. Orderlies are primarily concerned with setting up equipment and relieving nurses of heavier work. Exclude Psychiatric Aides and Home Health Aides.

66011 - Home Health Aides - Care for elderly, convalescent, or handicapped person in home of patient. Perform duties for patient such as changing bed linen; preparing meals; assisting in and out of bed; bathing, dressing, and grooming; and administering oral medications under doctors' orders or direction of nurse. Exclude Nursing Aides and Homemakers.

66014 - Psychiatric Aides - Assist mentally ill patients, working under direction of nursing and medical staff.

66017 - Physical and Corrective Therapy Assistants and Aides - Prepare patient and/or administer physical therapy treatment, such as massages, traction, and heat, light and sound treatment. Instruct, motivate, and assist patients with learning and improving functional activities. Normally work under the direction of a Physical or Corrective Therapist.

66021 - Occupational Therapy Assistants and Aides - Assist Occupational Therapists in administering medically-oriented occupational programs to assist in rehabilitating patients in hospitals and similar institutions.

66023 - Ambulance Drivers and Attendants, Except Emergency Medical Technicians - Drive ambulance or assist ambulance driver in transporting sick, injured, or convalescent persons. Assist in lifting patients and rendering first aid. May be required to have Red Cross first-aid training certificate.

66026 - Pharmacy Aides - Records drugs delivered to the pharmacy, stores incoming merchandise, and informs the supervisor of stock needs. May operate cash register and accept prescriptions for filling.

66099 - All Other Health Service Workers - All other health service workers not classified separately above.

Cleaning and Building Service Occupations

67002 - Maids and Housekeeping Cleaners - Perform any combination of tasks to maintain private households or commercial establishments, such as hotels, restaurants and hospitals, in a clean and orderly manner. Duties include making beds, replenishing linens, cleaning rooms and halls, and arranging furniture.

67005 - Janitors and Cleaners, Except Maids and Housekeeping Cleaners - Keep buildings in clean and orderly condition. Perform heavy cleaning duties, such as operating motor-driven cleaning equipment, mopping floors, washing walls and glass, and removing rubbish. Duties may include tending furnace and boiler, performing routine maintenance activities, notifying management of need for repairs and additions, and cleaning snow or debris from sidewalk.

67008 - Pest Controllers and Assistants - Spray or release chemical solutions or toxic gases and set mechanical traps to kill pests and vermin such as mice, termites, and roaches, that infest buildings and surrounding areas.

67099 - All Other Cleaning and Building Service Workers - All other cleaning and building service workers not classified separately above.

Personal Service Occupations

68002 - Barbers - Provide customers with barbering services, including cutting, trimming, shampooing, and styling hair. Give shaves and shape contour of hair line. May sell lotions, tonics, and other cosmetic supplies.

68005 - Hairdressers, Hairstylists, and Cosmetologists - Provide beauty services, such as suggesting hairstyles, cutting and treating hair and scalp, applying makeup, dressing wigs, and electrolysis, to customers. Exclude Shampooers, Manicurists, and Beauty School Instructors.

68008 - Manicurists - Clean, shape, and polish customers' fingernails and toenails.

68014 - Amusement and Recreation Attendants - Perform any of a variety of attending duties at amusement or recreation facility. Schedule use of recreation facilities, allocate equipment to participants of sporting events or recreational pursuits, collect fees for games played, or operate carnival rides and amusement concessions.

68017 - Guides - Escort individuals or groups on cruises, sightseeing tours, or through places of interest such as industrial establishments, public buildings, and art galleries.

68021 - Ushers, Lobby Attendants, and Ticket Takers - Assist patrons at entertainment events, such as sporting events, motion pictures, or theater performances. Collect admission tickets and passes from patrons. May assist in finding seats, searching for lost articles, and locating such facilities as rest rooms and telephones.

68023 - Baggage Porters and Bellhops - Carry baggage for travelers at transportation terminals or for guests at hotels or similar establishments. Additional duties include assisting handicapped persons, running errands, delivering ice, and directing people to their desired destinations.

68028 - Transportation Attendants, Except Flight Attendants and Baggage Porters - Provide personal services to insure the safety and comfort of passengers aboard ship, bus, or train. Greet passengers, explain use of safety equipment, serve meals and beverages, and answer questions related to travel. Exclude Flight Attendants.

68032 - Wardrobe, and Locker and Dressing Room Attendants - Care for costumes or uniforms. Distribute and keep record of clothing and related equipment issued and returned. Assist in dressing. May select and fit costumes for cast members, arrange for cleaning and pressing, and make minor alterations. Exclude Tailors and Dressmakers.

68035 - Personal and Home Care Aides - Perform a variety of tasks at places of residence. Duties include keeping house and advising families having problems with such things as nutrition, cleanliness, and household utilities. Exclude Nursing Aides and Home Health Aides.

68038 - Child Care Workers - Attend to children at child care centers, schools, businesses, and institutions. Perform variety of tasks such as dressing, feeding, bathing, and overseeing play. Exclude Preschool Teachers and Teacher Aides.

68041 - Funeral Attendants - Perform variety of tasks during funeral such as placing casket in parlor or chapel prior to service; arranging floral offerings or lights around casket; directing or escorting mourners; closing casket; and issuing and storing funeral equipment.

69999 - All Other Service Workers - All other service workers not classified separately above.

Agricultural, Forestry, Fishing, and Related Occupations

71002 - Farmers/Ranchers: Self-Employed - Self-employed workers who on an ownership or rental basis operate farms/ranches or other agricultural production establishments that primarily produce crops or livestock.

First-Line Supervisors

72002 - First-Line Supervisors and Managers/Supervisors - Agricultural, Forestry, Fishing, and Related Workers - Directly supervise and coordinate the activities of agricultural, forestry, fishing, and related workers. May supervise helpers assigned to these workers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same work as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of the employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

Timber Cutting and Logging Occupations

73002 - Fallers and Buckers - Fell trees and saw into specified log lengths, working alone or as a member of a team.

73005 - Choke Setters - Fasten chokers around logs, preparing to yard them from felling and bucking area to storage or loading landing.

73008 - Log-Handling Equipment Operators - Operate log handling equipment to unload log trucks and gondolas or deck logs by species, size, and sort.

73011 - Logging Tractor Operators - Drive tractor equipped with one or more accessories, such as bulldozer blade, frontal hydraulic shear, grapple, logging arch, cable winches, hoisting rack, or crane boom, to fell tree, to skid, load and unload, or stack logs, or to pull stumps or clear brush.

73099 - All Other Timber Cutting and Related Logging Workers - All other timber cutting and related logging workers not classified separately above.

Other Agricultural, Forestry, Fishing, and Related Occupations

79002 - Forest and Conservation Workers - Develop, maintain, and protect forest, forested areas, and woodlands through such activities as raising and transporting tree seedlings; combating insects, pests, and diseases harmful to trees; and controlling erosion and leaching of forest soil. Include Forester Aides, Seedling Pullers, and Tree Planters.

79008 - Log Graders and Scalers - Grade logs or estimate the marketable content or value of logs or pulpwood in sorting yards, millpond, log deck, or similar locations. Inspect logs for defects or measure logs to determine volume. Exclude Log Inspectors who are primarily buyers.

79011 - Graders and Sorters, Agricultural Products - Grade, sort, or classify unprocessed food and other agricultural products by size, weight, color, or condition. Exclude Inspectors and Graders of processed agricultural products.

79017 - Animal Caretakers, Except Farm - Feed, water, groom, exercise, or otherwise care for small or large animals, fish, or birds in zoos, circuses, pounds, laboratories, animal hospitals, aquariums, kennels, or stables. Clean and repair cages, pens, or fish tanks. May administer tests to animals or give treatments to sick or injured animals. May keep records of feedings, tests, and treatments; and of animals received and discharged.

79021 - Farm Equipment Operators - Drive and control farm equipment to till soil and to plant, cultivate, and harvest crops.

79033 - Pruners - Prune and treat ornamental and shade trees and shrubs in yards and parks to improve their appearance, health, and value. Cut away dead and excess branches from trees using handsaws, pruning hooks, sheers, and clippers. May use truck-mounted hydraulic lifts and power pruners. May scrape decayed matter from cavities in trees and fill holes with cement to promote healing and prevent further deterioration. Exclude workers who also perform duties of Sprayers/Applicators or Lawn Maintenance Workers.

79036 - Sprayers/Applicators - Spray herbicides, pesticides, and fungicides on trees, shrubs, and lawns using hoses and truck-mounted tank. Fill sprayer tank with water and chemicals according to prescribed formula. May use portable spray equipment. Exclude workers who also perform duties of Lawn Maintenance Workers or Pruners.

79041 - Laborers, Landscaping and Groundskeeping - Landscape and/or maintain grounds of property using hand or power tools or equipment. May work in nursery facility or at customer location. Workers typically perform a variety of tasks, which may include any combination of the following: sod laying, mowing, trimming, planting, watering, fertilizing, digging, raking, and sprinkler installation. Workers may help Brick and Stonemasons.

79806 - Veterinary Assistants - Examine animals for veterinarian, prepare animals for surgery, perform post-operational medical treatment as needed, and give medications to animals. Usually works directly under veterinarian. Receive extensive training on the job and may also have some postsecondary education such as trade school or junior college.

79856 - Farmworkers, Food and Fiber Crops - Manually plant, cultivate, and harvest food and fiber products such as grains, vegetables, fruits, nuts, and field crops (e.g., cotton, mint, hops, and tobacco). Use hand tools such as shovels, trowels, hoes, tampers, pruning hooks, shears, and knives. Duties may include tilling soil and applying fertilizers; transplanting, weeding, thinning, or pruning crops; applying fungicides, herbicides, or pesticides; and packing and loading harvested products. May construct trellises, repair fences and farm buildings, or participate in irrigation activities. Include workers involved in expediting pollination and those who cut seed tuber crops into sections for planting.

79858 - Farmworkers, Farm and Ranch Animals - Attend to live farm or ranch animals that may include cattle, sheep, swine, goats, and poultry produced for animal products such as meat, fur, skins, feathers, milk, and eggs. Duties may include feeding, watering, herding, grazing, castrating, branding, debeaking, weighing, catching, and loading animals. May maintain records on animals; examine animals to detect diseases and injuries; assist in birth deliveries; and administer medications, vaccinations, or insecticides as appropriate. May clean and maintain animal housing areas. Include workers who tend dairy milking machines, shear wool from sheep, collect eggs in hatcheries, place shoes on animals' hooves, and tend bee colonies.

79999 - All Other Agricultural, Forestry, Fishing, and Related Workers - All other agricultural, forestry, fishing, and related workers not classified separately above.

First-Line Supervisors and Managers/Supervisors - Production, Construction, Maintenance, and Related Occupations

81002 - First-Line Supervisors and Managers/Supervisors - Mechanics, Installers, and Repairers - Directly supervise and coordinate activities of mechanics, repairers, and installers and their helpers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same repair work as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

81005 - First-Line Supervisors and Managers/Supervisors - Construction Trades and Extractive Workers - Directly supervise and coordinate activities of construction or extractive workers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same construction work as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

81008 - First-Line Supervisors and Managers/Supervisors - Production and Operating Workers - Directly supervise and coordinate activities of production and operating workers, such as testers, precision workers, machine setters and operators, assemblers, fabricators, or plant and system operators. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same production work as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

81011 - First-Line Supervisors and Managers/Supervisors - Transportation and Material-Moving Machine and Vehicle Operators - Directly supervise and coordinate activities of transportation and material-moving machine and vehicle operators. May supervise helpers assigned to these workers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same work as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

81017 - First-Line Supervisors and Managers/Supervisors - Helpers, Laborers, and Material Movers, Hand - Directly supervise and coordinate activities of helpers, laborers, and material movers. Managers/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work, and may also engage in the same hand labor as the workers they supervise. Exclude work leaders who spend 20 percent or more of their time at tasks similar to those of employees under their supervision and report them in the occupations which are most closely related to their specific work duties.

81099 - All Other First-Line Supervisors and Managers/Supervisors - Production, Construction, Maintenance, and Related Workers - All other first-line supervisors in this category not classified separately above.

Inspectors and Related Occupations

83002 - Precision Inspectors, Testers, and Graders - Perform precision inspecting, testing, and grading of parts, products, and equipment for defects, wear, and deviations from specifications. The majority of these workers use precision measuring instruments and complex test equipment and hand tools. May make minor repairs. Exclude workers who combine inspection and testing with major repair work.

83005 - Production Inspectors, Testers, Graders, Sorters, Samplers, and Weighers - Inspect, test, grade, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products. Work may be performed before, during, or after processing.

83008 - Transportation Inspectors - Inspect equipment or goods in connection with the safe transport of cargo or people. Include rail transport inspectors, such as freight inspectors, car inspectors, rail inspectors, and other nonprecision inspectors of other types of transportation vehicles. Exclude Precision Inspectors.

83099 - All Other Inspectors, Testers, and Related Workers - All other inspectors, testers, and related workers not classified separately above.

Mechanics, Installers, and Repairers

Machinery and Related Mechanics, Installers, and Repairers

85110 - Machinery Maintenance Mechanics - Repair and maintain the operating condition of industrial production and processing machinery, printing machinery, and refinery and pipeline distribution systems. Duties include repairing machinery and mechanical equipment, such as pumps, conveyor systems, and motors, in accordance with diagrams, operating manuals, or manufacturer's specifications. Exclude Millwrights and Mobile Heavy Equipment Mechanics, such as crane, bulldozer, grader, or conveyor mechanics.

85118 - Machinery Maintenance Mechanics, Water or Power Generation Plant - Install, adjust, repair, and maintain machinery in power generating stations and water treatment plants. Duties include the repair and maintenance of: Mechanical elements of generators, waterwheels, piping, and water-inlet controls in generating stations; steam boilers, condensers, pumps, compressors, and similar equipment in gas manufacturing plants; and equipment used to process and distribute water for human consumption and industrial use.

85119 - All Other Machinery Maintenance Mechanics - All other machinery maintenance mechanics not classified separately above.

85123 - Millwrights - Install new machinery and heavy equipment according to layout plans, blueprints, and other drawings. Dismantle and move machinery and heavy equipment when changes in plant layout are required. Use a variety of hand tools, hoists, dollies, and trucks. May construct foundations for machines.

85128 - Machinery Maintenance Workers - Change parts, lubricate machinery, and perform other routine machinery maintenance. Exclude workers who repair machinery.

85132 - Maintenance Repairers, General Utility - Perform work involving two or more maintenance skills to keep machines, mechanical equipment, or structure of an establishment in repair. Duties may involve pipefitting, boilermaking, insulating, welding, machining, machine and equipment repairing, carpentry, and electrical work. May also include planning and laying out of work relating to repairs; repairing electrical and/or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs. This occupation is generally found in small establishments where specialization in maintenance work is impractical.

Mobile Equipment Mechanics, Installers, and Repairers

85302 - Automotive Mechanics - Adjust, repair, and overhaul automotive vehicles. May be designated according to specialties, such as Brake Repairers, Transmission Mechanics, or Front-end Mechanics. Exclude Auto Body Repairers, Bus and Truck Mechanics, Diesel Engine Specialists, and Electrical Systems Specialists.

85305 - Automotive Body and Related Repairers - Repair, repaint, and refinish automotive vehicle bodies; straighten vehicle frames; and replace damaged vehicle glass.

85308 - Motorcycle Repairers - Repair and overhaul motorcycles, motor scooters, mopeds, or similar motorized vehicles.

85311 - Bus and Truck Mechanics and Diesel Engine Specialists - Repair and maintain the operating condition of trucks, buses, and all types of diesel engines. Include mechanics working primarily with automobile diesel engines.

85314 - Mobile Heavy Equipment Mechanics, Except Engines - Repair and maintain mobile mechanical, hydraulic, and pneumatic equipment, such as cranes, bulldozers, graders, and conveyors, used in construction, logging, and surface mining. Exclude Rail Car Repairers and Diesel Engine Specialists.

85317 - Rail Car Repairers - Repair and rebuild railroad rolling stock, mine cars, and trolley or subway cars, according to Federal and company regulations and specifications. Exclude Engine Specialists.

85321 - Farm Equipment Mechanics - Maintain, repair, and overhaul farm machinery and vehicles, such as tractors, harvesters, and irrigation systems. Include repairers of dairy equipment. Exclude Engine Specialists.

85323 - Aircraft Mechanics - Repair and maintain the operating condition of aircraft assemblies, such as hydraulic and pneumatic systems, landing gear, propeller assemblies, fuel tanks, and airframe assemblies. Inspect, test, modify, and install equipment according to specifications, using tools such as power shears, acetylene welding equipment, rivet guns, and air or electric drills. Include Helicopter Repairers. Exclude Aircraft Engine Specialists and Aircraft Electricians.

85326 - Aircraft Engine Specialists - Repair and maintain the operating condition of aircraft engines. Include Helicopter Engine Mechanics. Exclude Electrical System Specialists and Aircraft Mechanics whose primary duties do not involve engine repair.

85328 - Small Engine Specialists - Repair and maintain the operating condition of nonautomobile gasoline-powered, internal combustion engines and the equipment powered by those engines. Include repairers of outboard motors, snowmobiles, lawn mowers, and chain saws. Exclude Motorcycle Repairers.

Communications Equipment Mechanics, Installers, and Repairers

85502 - Central Office and PBX Installers and Repairers - Test, analyze, and repair telephone or telegraph circuits and equipment at a central office location using test meters and hand tools. Analyze and repair defects in communications equipment on customers' premises using circuit diagrams, polarity probes, meters, and a telephone test set. May install equipment.

85505 - Frame Wirers, Central Office - Connect wires from telephone lines and cables to distributing frames in telephone company central office, using soldering iron and other hand tools.

85511 - Signal or Track Switch Maintainers - Install, inspect, test, and repair electric gate crossings, signals, signal equipment, track switches, section lines, and intercommunication systems within a railroad system, following blueprints and work orders.

85514 - Radio Mechanics - Test and repair stationary, mobile, and portable radio transmitting and receiving equipment and two-way radio communications systems, used in ship-to-shore communications and found in service and emergency vehicles, in accordance with diagrams and manufacturers' specifications. Examine equipment for damaged components and loose or broken connections and wires; replace defective

components and parts. Involves use of hand tools and electrical measuring instruments. May repair intercommunication telephone systems. Occupation may require federal Communications Commission Radiotelephone Operator's License, depending on the nature of repairs performed.

85599 - All Other Communications Equipment Mechanics, Installers, and Repairers - All other communications equipment mechanics, installers, and repairers not classified separately above.

Other Electrical and Electronic Equipment Mechanics, Installers, and Repairers

85702 - Telephone and Cable Television Line Installers and Repairers - String and repair telephone and television cable and other equipment for transmitting messages or TV programming. Duties include locating and repairing defects in existing systems; placing, rearranging, and removing underground or aerial cables; installing supports, insulation, or guy wire systems; and other auxiliary tasks necessary to maintain lines and cables.

85705 - Data Processing Equipment Repairers - Repair, maintain, and install electronic computers (mainframes, minis, and micros), peripheral equipment, and word processing systems.

85708 - Electronic Home Entertainment Equipment Repairers - Adjust and repair radios, televisions, stereo systems, recorders, video systems, or other electronic home entertainment equipment.

85711 - Electric Home Appliance and Power Tool Repairers - Repair, adjust, and install all types of electric household appliances, such as refrigerators, washing machines, dishwashers, vacuum cleaners, room air conditioners, and small appliances, including toasters, mixers, and food processors. Include repairers of electrical hand and bench tools, such as lathes, drills, saws, grinders, and polishers.

85714 - Electric Motor, Transformer, and Related Repairers - Install, repair, and maintain electric motors, batteries, transformers, wiring, and switches, using hand and power tools, gauges, and test instruments.

85717 - Electronics Repairers, Commercial and Industrial Equipment - Repair electronic equipment such as industrial controls, telemetering and missile control systems, radar systems, transmitters, and antennae, using hand tools and testing instruments. Exclude repairers of data processing equipment and home entertainment equipment.

85721 - Powerhouse, Substation, and Relay Electricians - Inspect, test, repair, and maintain electrical equipment in generating stations or powerhouses; substation equipment, such as oil circuit breakers and transformers; and in-service relays, to prevent and remedy abnormal behavior of transmission and distribution lines and equipment.

85723 - Electrical Power-Line Installers and Repairers - Install and repair cables or wires used in electrical power or distribution systems. Install insulators, erect wooden poles and light or heavy duty transmission towers. Include Cable Splicers and Trouble Shooters. Exclude repairers of transformers and substation equipment, and telephone and telegraph communications workers.

85726 - Station Installers and Repairers, Telephone - Install and repair telephone station equipment, such as telephones, coin collectors, telephone booths, and switching-key equipment.

85728 - Electrical Installers and Repairers, Transportation Equipment - Install, adjust, and maintain electrical systems and wiring switches and fixtures on motor vehicles, trains, or aircraft.

85799 - All Other Electrical and Electronic Equipment Mechanics, Installers, and Repairers - All other electrical and electronic equipment mechanics, installers, and repairers not classified separately above.

Other Mechanics, Installers, and Repairers

85902 - Heating, Air Conditioning, and Refrigeration Mechanics and Installers - Install and repair heating, air conditioning, and refrigerating systems. Duties include installation and repair of oil burners, hot-air furnaces, heating stoves, and similar equipment in homes and commercial establishments, using hand and pipe threading tools. Includes the installation and repair of cooling and central air conditioning systems.

85905 - Precision Instrument Repairers - Install, test, repair, maintain, and adjust indicating, recording, telemetering, and controlling instruments used to measure and control variables such as pressure, flow, temperature, motion, force, and chemical composition. Include instrument repairers who repair, calibrate, and test instruments such as voltmeters, ammeters, and galvanometers.

85908 - Electromedical and Biomedical Equipment Repairers - Test, adjust, and repair electromedical equipment using hand tools and meters.

85911 - Electric Meter Installers and Repairers - Install electric meters on customers' premises or on pole. Test meters and perform necessary repairs. Turn current on/off by connecting/disconnecting service drop.

85921 - Musical Instrument Repairers and Tuners - Repair percussion, stringed, and wind instruments. May specialize in tuning one type of instrument, such as a Piano Tuner. Exclude Electric Organ Repairers.

85923 - Locksmiths and Safe Repairers - Repair and open locks; make keys; change locks and safe combinations; and install and repair safes.

85926 - Office Machine and Cash Register Servicers - Repair and service office machines, such as adding, accounting, calculating, duplicating, and typewriting machines. Include the repair of manual, electrical, and electronic office machines. Exclude the repair of computerized systems and word processing systems.

85928 - Mechanical Control and Valve Installers and Repairers - Install, repair, and maintain mechanical regulating and controlling devices, such as gas regulators, thermostats, safety and flow valves, and other mechanical governors.

85932 - Elevator Installers and Repairers - Assemble, install, repair, and maintain electric and hydraulic freight and passenger elevators, escalators, and dumbwaiters.

85938 - Installers and Repairers, Manufactured Buildings, Mobile Homes, and Travel Trailers - Install, repair, and maintain units and systems in mobile homes, prefabricated buildings, or travel trailers, using hand tools or power tools.

85944 - Gas Appliance Repairers - Repair and install gas appliances and equipment, such as ovens, dryers, and hot water heaters.

85947 - Coin and Vending Machine Servicers and Repairers - Install, service, adjust, and repair coin or vending machines placed in establishments on a concessional basis, using hand or power tools. Exclude repairers of electronic video games and other specialized electronic vending machines.

85951 - Bicycle Repairers - Repair and service bicycles using hand tools.

85953 - Tire Repairers and Changers - Repair and replace tires, tubes, treads, and related products on automobiles, buses, trucks, and other vehicles. Duties include mounting tires on wheels, balancing tires and wheels, and testing and repairing damaged tires and inner tubes.

85956 - Menders, Garments, Linens, and Related - Repair defects such as tears and holes in garments, linens, curtains, and draperies. Rebind cleaned blankets by hand or by operating a sewing machine.

85999 - All Other Mechanics, Installers, and Repairers - Include all mechanics, installers, and repairers not classified separately above.

Construction Trades and Extractive Occupations, Except Material-Moving

Carpentry and Related Occupations

87102 - Carpenters - Construct, erect, install and repair structures, fixtures, and equipment of wood, plywood, and wallboard, using carpentry tools and woodworking machines.

87105 - Ceiling Tile Installers and Acoustical Carpenters - Apply or mount acoustical tiles or blocks, strips, or sheets of shock-absorbing materials to ceilings and walls of buildings to reduce or reflect sound. Materials may be of decorative quality. Exclude carpet, wood, or hard tile installers.

87108 - Drywall Installers - Apply plasterboard or other wallboard to ceilings and interior walls of buildings.

87111 - Tapers - Seal joints between plasterboard or other wallboard to prepare wall surface for painting or papering.

87114 - Lathers - Fasten wooden, metal, or rockboard lath to walls, ceilings, and partitions of buildings to provide supporting base for plaster, fire-proofing, or acoustical material.

Electrical and Related Occupations

87202 - Electricians - Install, maintain, and repair electrical wiring, equipment, and fixtures. Insure that work is in accordance with relevant codes. May read blueprints. Include Protective Signal Installers and Repairers and Streetlight Servicers.

Masonry and Related Occupations

87302 - Brickmasons - Lay building materials, such as brick, structural tile, concrete, cinder, glass, gypsum, and terra cotta block (except stone), to construct or repair walls, partitions, arches, sewers, and other structures. Include Refractory Brickmasons.

87305 - Stonemasons - Build stone structures, such as piers, walls, and abutments. Lay walks, curbstones, or special types of masonry for vats, tanks, and floors.

87308 - Hard Tile Setters - Apply hard tile to walls, floors, ceilings, and other areas following design specifications.

87311 - Concrete and Terrazzo Finishers - Apply cement, sand, pigment, or marble chips to floors, stairways, and cabinet fixtures to finish and attain durable and decorative surfaces, according to specifications and drawings. Finish surfaces to remove imperfections from freshly poured concrete walls, roads, walkways, and ornamental stone facings of concrete structural products. Include Concrete Rubbers.

87317 - Plasterers and Stucco Masons - Apply coats of plaster onto interior or exterior walls, ceilings, or partitions of buildings to produce finished surface according to blueprints, architect's drawings, or oral instructions.

Painting and Related Occupations

87402 - Painters and Paperhangers, Construction and Maintenance - Painters: Paint walls, equipment, buildings, bridges, and other structural surfaces, using brushes, rollers, and spray guns. May mix colors or oils to obtain desired color or consistency. Paperhangers: Cover interior walls and ceilings of rooms with decorative wallpaper or fabric, or attach advertising posters on surfaces such as walls and billboards. Duties include removing old materials from surface to be papered.

Plumbing and Related Occupations

87502 - Plumbers, Pipefitters, and Steamfitters - Assemble, install, alter, and repair pipe systems (metal, plastic, ceramic, composition, etc.) that carry water, steam, air, or other liquids or gases.

87508 - Pipelayers - Lay glazed or unglazed clay, concrete, plastic, or cast-iron pipe for storm or sanitation sewers, drains, water mains, and oil or gas lines. Perform any combination of the following tasks: Grade trenches or culverts, position pipe, or seal joints.

87511 - Septic Tank Servicers and Sewer Pipe Cleaners - Clean and repair septic tanks, sewer lines, or drains. May patch walls and partitions of tank, replace damaged drain tile, or repair breaks in underground piping.

Floor Related Workers, Except Carpenters

87602 - Carpet Installers - Lay carpets or rugs in homes or buildings. Exclude workers who lay linoleum.

87605 - Floor Layers, Except Carpet, Wood, and Hard Tiles - Apply blocks, strips, or sheets of shock-absorbing, sound-deadening, or decorative coverings to floors and cabinets. Include soft tile setters. Exclude Acoustical Carpenters and installers of carpets, wood, or hard tile.

Road, Rail, and Related Construction and Maintenance Workers, Except Masonry Workers

87702 - Air Hammer Operators - Use air hammer to: Break asphalt, concrete, stone, or other pavement; loosen earth, dig clay, or break rock, to trim bottom or sides of trenches or other excavations; drill holes in concrete; reduce size of large stones; or tamp earth in backfills.

87705 - Pile-Driver Operators - Operate pile drivers mounted on skids, barges, crawler treads, or locomotive cranes to drive pilings for foundations of structures, such as buildings, bridges, and piers.

87708 - Paving, Surfacing, and Tamping Equipment Operators - Operate equipment used for applying concrete, asphalt, or other materials to road beds, parking lots, or airport runways and taxiways, or equipment used for tamping gravel, dirt, or other materials. Include Concrete and Asphalt Paving Machine Operators, Form Tampers, Tamping Machine Operators, and Stone Spreader Operators.

87711 - Highway Maintenance Workers - Maintain highways, municipal and rural roads, airport runways, and rights-of-way in safe condition. Duties include patching broken or eroded pavement, and erecting and repairing guardrails, highway markers, and snow fences using a posthole digger, shovel, axe, saw, hammer and nails, or power tools. May also clear brush or plant trees along rights-of-way.

87714 - Rail-Track Laying and Maintenance Equipment Operators - Lay, repair, and maintain track for standard or narrow-gauge railroad equipment used in regular railroad service or in plant yards, quarries, sand and gravel pits, and mines. Include Ballast Cleaning Machine Operators and Road Bed Tamping Machine Operators.

Other Construction Trades Occupations

87802 - Insulation Workers - Cover and line structures with insulation using saws, knives, rasps, trowels, and other tools and implements. May also specialize in providing blown-in insulation.

87803 - Hazardous Materials Removal Workers - Remove, pack, transport, and/or dispose of hazardous materials, including asbestos, waste fuel, contaminated soil, etc. Specialized training and certification in hazardous materials handling and/or a confined entry permit are generally required.

87805 - Sheet Metal Duct Installers - Install prefabricated sheet metal ducts used for heating, air conditioning, or other purposes in buildings and similar structures.

87808 - Roofers - Cover roofs of structures with slate, asphalt, aluminum, wood, and related materials using brushes, knives, punches, hammers, and other tools. May spray roofs, sidings, and walls with material to bind, seal, insulate, or soundproof sections of structures.

87811 - Glaziers - Install glass in windows, skylights, storefronts, and display cases, or on surfaces such as building fronts, interior walls, ceilings, and tabletops. Exclude Glaziers who work primarily on production lines.

87814 - Structural Metal Workers - Raise, place, and unite girders, columns, and other structural steel members to form completed structures or structural frameworks. Include workers who erect metal storage tanks and assemble prefabricated metal buildings. Exclude reinforcing metal workers.

87817 - Fence Erectors - Erect and repair metal and wooden fences and fence gates around highways, industrial establishments, residences, or farms, using hand and power tools.

87899 - All Other Construction Trades Workers - All other construction trades workers not classified separately above.

Extractive and Related Occupations, Including Blasters

87902 - Earth Drillers, Except Oil and Gas - Operate a variety of drills to tap subsurface water and salt deposits, to remove core samples during mineral exploration or soil testing, and to facilitate the use of explosives in mining or construction. Include Core, Well, and Foundation Drill Operators and Horizontal and Earth Boring Machine Operators. Exclude Oil Well Drillers.

87905 - Blasters and Explosives Workers - Place explosives in holes or other spots and detonate the explosives to demolish structures or to loosen, remove, or displace earth, rock, or other materials. Include Tier-Detonator Blasters, Perforator Operators, and Seismograph Shooters.

87911 - Rotary Drill Operators, Oil and Gas Extraction - Set up or operate a variety of drills to remove petroleum products from the earth and to remove core samples for testing during oil and gas exploration. Include Core and Rotary Drillers and Well and Prospecting Drillers.

87914 - Derrick Operators, Oil and Gas Extraction - Rig derrick equipment and operate pumps to circulate mud through drill hole.

87917 - Service Unit Operators - Operate equipment to increase oil flow from producing wells or to remove stuck pipe, casing, tools, or other obstructions from drilling wells. Include Fishing-Tool Technicians.

87921 - Roustabouts - Perform a variety of assigned tasks in or around an oil field such as assembling or repairing equipment, digging drainage trenches, and loading/unloading trucks.

87923 - Roof Bolters - Operate self-propelled machine to install roof support bolts in underground mine.

87941 - Continuous Mining Machine Operators - Operate self-propelled mining machines that rip coal, metal and nonmetal ores, rock, stone, or sand from the face and load it onto conveyors or into shuttle cars in a continuous operation.

87943 - Mine Cutting and Channeling Machine Operators - Operate machines that cut or channel along the face or seams of coal mines, stone quarries, or other mining surfaces to facilitate blasting, separating, or removing minerals or materials from mines or from the earth's surface. Include Shale Planers.

87949 - All Other Mining Machine Operators - All other mining machine operators not classified separately above.

87989 - All Other Extractive Workers, Except Helpers - All other extractive workers, except helpers, not classified separately above.

87999 - All Other Construction and Extractive Workers, Except Helpers - All other construction and extractive workers, except helpers, not classified separately above.

Precision Production Occupations

Precision Metal Occupations

89102 - Tool and Die Makers - Analyze specifications, lay out metal stock, set up and operate machine tools, and fit and assemble parts to make and repair dies, cutting tools, jigs, fixtures, gauges, and machinist's hand tools. Include Paper Die Maker and Die Sinker. Exclude Die Setters.

89105 - Precision Instrument Makers - Fabricate, modify, or repair mechanical instruments or mechanical assemblies of electrical or electronic instruments, such as chronometric timing devices, thermostats, seismographs, and servomechanisms. Set up and operate machine tools to remodel electrical and electronic instruments used in electrical logging, sub-surface surveying, and other oil, gas, or borehole prospecting, testing, and servicing operations.

89108 - Machinists - Set up and operate variety of machine tools. Fit and assemble parts to make or repair machine tools and maintain industrial machines, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures. Study specifications, such as blueprints, sketch, or description of part to be replaced, and plan sequence of operations.

89111 - Tool Grinders, Filers, Sharpeners, and Other Precision Grinders - Perform such operations as precision smoothing, sharpening, polishing, and grinding of metal objects by the wearing action of abrasive materials or machine files. Include Tool, Cylinder, and Card Grinders and Grinder Operators, Saw Filers, and Filer-Finishers.

89114 - Pattern and Model Makers, Metal - Patternmakers, Metal: Lay out, machine, fit, and assemble castings and parts to metal foundry patterns, core boxes, and match plates using hand and machine tools. Analyze specifications according to knowledge of patternmaking methods. Include Plastic Patternmakers. Model Makers: Set up and operate machines such as model maker's lathe, milling and engraving machines, and jig borers to make working models of metal or plastic objects. Include Template Makers. Exclude Jewelry Pattern and Model Makers. Exclude workers who do not work primarily with metal and plastic but work with other material or a combination of materials.

89117 - Precision Lay-Out Workers, Metal - Lay out reference points and dimensions on metal stock or workpieces, such as sheets, plates, tubes, structural shapes, castings, or machine parts, for further processing, such as machining, fabricating, welding, and assembling.

89123 - Jewelers and Silversmiths - Jewelers: Fabricate, adjust, or repair jewelry. Silversmiths: Design, assemble, decorate, or repair silver articles. May specialize in one or more areas of the jewelry field, such as repairing, selling, or appraising. Exclude workers who perform a specialized operation such as fancy wire drawing.

89126 - Precision Hand Workers, Jewelry and Related Products - Perform such operations as precision casting and modeling of molds, casting metal in molds, and setting precious and semi-precious stones for jewelry, silverware, plateware, ornamental figurines, trophies, and plaques. May make gold or silver chains and cut designs or lines in jewelry. Workers in these categories usually use hand tools or small cutting machines. Include Pearl Restorers, Jewelry Bench Hands, and Solderers.

89132 - Sheet Metal Workers - Fabricate, assemble, install, and repair sheet metal products and equipment, such as control boxes, drainpipes, and furnace casings. Work may involve any of the following: Set up and operate fabricating machines to cut, bend, and straighten sheet metal; shape metal over anvils, blocks, or forms using hammer; operate soldering and welding equipment to join sheet metal parts; inspect, assemble, and smooth seams and joints of burred surfaces.

89135 - Boilermakers - Construct, assemble, maintain, and repair stationary steam boilers and boiler house auxiliaries. Align structures or plate sections to assemble boiler frame tanks or vats, following blueprints. Work involves use of hand and power tools, plumb bobs, levels, wedges, dogs, or turnbuckles. Assist in testing assembled vessels. Direct cleaning of boilers and boiler furnaces. Inspect and repair boiler fittings, such as safety valves, regulators, automatic-control mechanisms, water columns, and auxiliary machines.

89199 - All Other Precision Metal Workers - All other precision metal workers not classified separately above.

Precision Wood Occupations

89305 - Pattern Markers, Wood - Lay out outline of frames and furniture parts on wood stock to guide machine operators working from blueprints, job orders, or models.

89308 - Wood Machinists - Set up and operate a variety of woodworking machines to surface, cut, and shape lumber, and to fabricate parts for wood products, such as door and window frames, furniture, and sashes, according to specifications. Exclude workers primarily concerned with one or a limited number of machine phases and report them according to their specialty.

89311 - Cabinetmakers and Bench Carpenters - Cut, shape, and assemble wooden articles, such as store fixtures, office equipment, cabinets, and high grade furniture. Set up and operate variety of machines, such as power saws, jointers, mortisers, tenoners, molders, and shapers, to cut and shape parts from wood stock. Exclude workers primarily concerned with one or a limited number of machine phases and report them according to their specialty.

89314 - Furniture Finishers - Shape, finish, and refinish damaged, worn, or used furniture or new high-grade furniture to specified color or finish, utilizing knowledge of wood properties, finishes, and furniture style.

89399 - All Other Precision Woodworkers - All other precision woodworkers not classified separately above.

Precision Textile, Apparel, and Furnishings Occupations

89502 - Fabric and Apparel Patternmakers and Layout Workers - Draw and construct sets of precision master patterns or layouts. Mark and cut fabrics and apparel according to blueprints or specifications.

89505 - Custom Tailors and Sewers - Design and make tailored garments, applying knowledge of garment design, construction, styling, and fabric. Alter, repair, or fit made-to-measure or ready-to-wear garments, sewing by hand or machine.

89508 - Upholsterers - Make, repair, and replace upholstery for household furniture or transportation vehicles, using knowledge of fabrics and methods of upholstery. Include workers in both manufacturing and nonmanufacturing industries. Exclude workers who perform a specialized operation such as Sewing Machine Operators, Assemblers, and Hand Cutters and Trimmers.

89511 - Shoe and Leather Workers and Repairers, Precision - Construct, decorate, or repair precision leather products, such as luggage, shoes, and saddles, using machines and hand tools. Include workers who work with leather-like materials when process is similar.

89514 - Spotters, Dry-Cleaning - Identify stains in wool, synthetic, and silk garments and household fabrics and apply chemical solutions to remove stain. Determine spotting procedures on basis of type of fabric and nature of stain.

89517 - Pressers, Delicate Fabrics - Press dry-cleaned and wet-cleaned silk and synthetic fiber garments by hand or machine, applying knowledge of fabrics and heat to produce high quality finish. Finish pleated or fancy garments, normally by hand.

89599 - All Other Precision Textile, Apparel, and Furnishings Workers - All other precision textile, apparel, and furnishings workers not classified separately above.

Precision Printing Occupations

89702 - Hand Compositors and Typesetters - Set up and arrange type by hand. Assemble and lock setup of type, cuts, and headings. Pull proofs. Exclude Phototypesetters or other workers concerned with typesetting by electronic or word processing methods.

89705 - Job Printers - Set type according to copy. Operate cylinder or automatic platen press to print job order. Read proof for errors and clarity of impression, and correct imperfections. Job printers are often found in small establishments where work combines several job skills, such as typesetting, printing, reading, and selecting of materials to reproduce copy.

89706 - Paste-Up Workers - Arrange and mount typeset material and illustrations into pasteup for printing reproduction, based on artist's or editor's layout.

89707 - Electronic Pagination System Operators - Using a computer screen, call up type and art elements from computer memory and position them into a completed page, using knowledge of typesets and size and composition patterns. The composited page is then transmitted for production into film or directly into plates.

89712 - Photoengravers - Photograph copy, develop negatives, and prepare photosensitized metal plates for use in letterpress and gravure printing. Include photoengraving specialists such as Printers, Etchers, Finishers, and Proofers.

89713 - Camera Operators - Operate process, line, halftone, or color separation cameras and related darkroom equipment to photograph and develop negatives of material to be printed.

89715 - Scanner Operators - Operate electronic or computerized scanning equipment to produce and screen film separations of photographs or art for use in producing lithographic printing plates. Evaluate and correct for deficiencies in the film.

89717 - Strippers - Cut and arrange film into flats (layout sheets resembling a film negative of text in its final form) which are used to make plates. Prepare separate flat for each color.

89718 - Platemakers - Produce printing plates by exposing sensitized metal sheets to special light through a photographic negative. May operate machines that process plates automatically.

89799 - All Other Precision Printing Workers - All other precision printing workers not classified separately above.

Precision Food Occupations

89802 - Slaughterers and Butchers - Work in a slaughtering or meatpacking establishment to prepare meat for sale by performing precision tasks such as stunning, skinning and trimming; cutting standard cuts of meat for marketing; cleaning and salting hides; making sausage; preparing meats for salting; and wrapping meats.

89805 - Bakers, Manufacturing - Mix and bake ingredients according to recipes to produce breads, pastries, and other baked goods. Goods are produced in large quantities for sale through establishments such as grocery stores. Generally, high volume production equipment is used.

89808 - Food Batchmakers - Set up and operate equipment that mixes, blends, or cooks ingredients used in the manufacturing of food products, according to formulas or recipes. May modify or reformulate recipes to produce products of specific flavor, texture, and color. This occupation requires at least 1 year (and often more) of training or experience. Include Candy Makers, Almond Paste Mixers, Cheese Makers, Flavorings Compounders, and Honey Graders and Blenders.

Other Precision Occupations

89902 - Precision Foundry Mold and Coremakers - Make and form wax or sand cores and molds used in the production of metal castings in foundries. Work involves using hand and power tools and applying knowledge of variables such as metal characteristics, molding sand, contour of patterns, reinforcing, and pouring procedures.

89905 - Precision Molders, Shapers, Casters, and Carvers, Except Jewelry and Foundry - Mold, shape, cast, or carve products consisting of clay, glass, plaster, concrete, and stone, or combinations of materials into semifinished or finished products.

89911 - Precision Detail Design Decorators and Painters - Design or decorate articles such as jewelry, furniture, glassware, pottery, or toys with paints, lacquers, enamels, shellac, or gilt. Types of processes include painting, carving, printing, drawing, artistic lettering, decorative screen making, advertising layout, and detail design of forms. Include Screen or Stencil Printers and Setters, Layout Formers, Gilders, Luster Applicators, and Tile Decorators. Exclude professional Artists and Designers and workers concerned with developing, coloring, and retouching photographs.

89914 - Precision Photographic Process Workers - Perform precision work involved in photographic processing, such as retouching photographic negatives and prints to stress specific features or identifying characteristics of subjects. Restore damaged and faded photographs. Color or shade drawings to create photographic likenesses using an airbrush. May also color photographs using oil colors, to produce natural, lifelike appearances according to specifications.

89917 - Precision Optical Goods Workers - Cut, grind, and polish eyeglasses, contact lenses, or other precision optical elements according to prescription or other specifications. Assemble and mount lenses into frames and process other optical elements according to specifications. Work usually involves the use of precision machines and instruments. Include Precision Lens Polishers or Grinders, Centerer-Edgers, and Lens Mounters.

89921 - Precision Dental Laboratory Technicians - Construct and repair full or partial dentures or dental appliances or apparatus, following prescriptions or specifications of Dentists or Orthodontists. May also provide analytical and diagnostic services. Include Dental Ceramists, Crown and Bridge Technicians, and Orthodontic Technicians. Exclude Assistants, Bite-Block Makers, Opaquers, and Denture and Coiler Packers.

89923 - Medical Appliance Makers - Construct, fit, maintain, and repair medical supportive devices, such as braces, artificial limbs, and arch supports, and other surgical and medical appliances, following the prescriptions and specifications of Orthotists, Prosthetists, or Podiatrists. May instruct patients in the use of the device.

89999 - All Other Precision Workers - All other precision workers not classified separately above.

Machine Setters, Set-Up Operators, Operators, and Tenders

Machine Tool Cutting Setters, Operators, and Related Occupations - Metal and Plastic

91102 - Sawing Machine Tool Setters and Set-Up Operators, Metal and Plastic - Set up or set up and operate metal or plastic sawing machines to cut straight, curved, irregular, or internal patterns in metal or plastic stock or to trim edges of metal or plastic objects. Involves the use of such machines as band saws, circular saws, friction saws, hacksawing machines, and jigsaws.

91105 - Lathe and Turning Machine Tool Setters and Set-Up Operators, Metal and Plastic - Set up or set up and operate plastic or metal lathe and turning machines to turn, bore, thread, form, or face plastic or metal materials, such as wire, rod, or bar stock, according to specifications.

91108 - Drilling and Boring Machine Tool Setters and Set-Up Operators, Metal and Plastic - Set up or set up and operate drilling machines to drill, bore, ream, mill, and countersink metal or plastic workpieces according to specifications.

91111 - Milling and Planing Machine Setters and Set-Up Operators, Metal and Plastic - Set up or set up and operate milling or planing machines to mill, plane, shape, groove, or profile metal or plastic workpieces according to specifications.

91114 - Grinding, Lapping, and Buffing Machine Tool Setters and Set-Up Operators, Metal and Plastic - Set up or set up and operate grinding and related tools that remove excess material or burrs from internal and external surfaces, sharpen edges or corners, or buff, hone, and polish metal or plastic workpieces according to specifications.

91117 - Machine Tool Cutting Operators and Tenders, Metal and Plastic - Operate or tend one type of cutting machine tool which has previously been set up. Exclude workers who operate or tend more than one type of cutting machine. Types of cutting machine tools include: Sawing Machines, Grinding Machines, Lathe and Turning Machines, Buffing and Polishing Machines, Drilling and Boring Machines, Lapping and Honing Machines, Milling and Planing Machines.

Machine Forming Setters, Operators, and Related Occupations - Metal and Plastic

91302 - Punching Machine Setters and Set-Up Operators, Metal and Plastic - Set up or set up and operate machines to punch, crimp, cut blanks, or notch metal or plastic workpieces between preset dies, according to specifications.

91305 - Press and Press-Brake Machine Setters and Set-Up Operators, Metal and Plastic - Set up or set up and operate power-press machines or power-brake machines to bend, form, stretch, notch, punch, or straighten metal or plastic plate and structural shapes, as specified by work order, blueprints, drawing, templates, or layout.

91308 - Shear and Slitter Machine Setters and Set-Up Operators, Metal and Plastic - Set up or set up and operate power-shear or slitting machines to cut metal or plastic material, such as plates, sheets, slabs, billets or bars, to specified dimensions and angles.

91321 - Machine Forming Operators and Tenders, Metal and Plastic - Operate or tend one type of forming machine which has previously been set up. Exclude workers who operate more than one type of forming machine. Types of forming machines include: Punching Machines, Rolling Machines, Shear and Slitter Machines, Press and Press Brake Machines, Extruding and Drawing Machines, Forging Machines.

NUMERICAL AND COMBINATION MACHINE TOOL SETTERS, OPERATORS, AND RELATED WORKERS- METAL AND PLASTIC

91502 - Numerical Control Machine Tool Operators and Tenders, Metal and Plastic - Set up and operate computer-numerically controlled machine tools or robots to perform one or more machine functions on metal or plastic workpieces.

91505 - Combination Machine Tool Setters and Set-Up Operators, Metal and Plastic - Set up or set up and operate more than one type of cutting or fabricating machine tool or robot. Exclude workers who set up or set up and operate only one type of metal or plastic working machine or robot.

91508 - Combination Machine Tool Operators and Tenders, Metal and Plastic - Operate or tend more than one type of cutting or fabricating machine tool or robot that has been previously set up. Exclude workers who operate or tend only one type of cutting or fabricating machine or robot.

Metal Fabricating and Related Machine Setters, Operators, and Related Occupations

91702 - Welding Machine Setters and Set-Up Operators - Set up or set up and operate welding machines or robots that join or bond together components to fabricate metal products or assemblies, according to specifications and blueprints.

91705 - Welding Machine Operators and Tenders - Operate or tend welding machines or robots that join or bond together components to fabricate metal products and assemblies, according to specifications and blueprints.

91714 - Metal Fabricators, Structural Metal Products - Fabricate and assemble structural metal products, such as frameworks or shells for machinery, ovens, tanks, and stacks, and metal parts for buildings and bridges, according to job order or blueprints.

Metal and Plastic Processing Machine Setters, Operators, and Related Occupations

91902 - Plastic Molding and Casting Machine Setters and Set-Up Operators - Set up or set up and operate plastic molding machines, such as compression or injection molding machines, to mold, form, or cast thermoplastic materials to specified shape.

91905 - Plastic Molding and Casting Machine Operators and Tenders - Operate or tend plastic molding machines, such as compression or injection molding machines, to mold, form, or cast thermoplastic materials to specified shape.

91911 - Metal Molding, Coremaking, and Casting Machine Operators and Tenders - Operate or tend metal molding, casting, or coremaking machines to mold or cast metal products, such as pipes, brake drums, and rods, and metal parts, such as automobile trim, carburetor housings, and motor parts. Machines include: Die casting and continuous casting machines; roll-over, squeeze, and shell molding machines; centrifugal casting machines; vacuum casting machines; turnover draw-type coremaking machines; and conveyor-screw coremaking machines.

91914 - Foundry Mold Assembly and Shake-Out Workers - Prepare molds for pouring. Duties include: Cleaning and assembling foundry molds, and tending machine that bonds cope and drag together to form completed shell mold.

91917 - Electrolytic Plating and Coating Machine Setters and Set-Up Operators, Metal and Plastic - Set up or set up and operate electrolytic plating or coating machines, such as continuous multistrand electrogalvanizing machines, to coat metal or plastic products electrolytically with chromium, copper, cadmium, or other metal to provide protective or decorative surfaces or to build up worn surfaces.

91935 - Furnace Operators and Tenders - Operate or tend furnaces, such as gas, oil, coal, electric-arc or electric induction, open-hearth, or oxygen furnaces, to melt and refine metal before casting or to produce specified types of steel. Exclude Heat-Treating and Related Furnace Operators.

Other Metal and Plastic Machine Setters, Operators, and Related Occupations

92198 - All Other Metal and Plastic (Cutting, Forming, Fabricating, or Processing) Machine Operators and Tenders - All other metal and plastic machine operators and tenders not classified separately above.

Woodworking Machine Setters, Operators, and Related Occupations

92302 - Sawing Machine Setters and Set-up Operators - Set up or set up and operate wood-sawing machines. Examine blueprints, drawings, work orders, and patterns to determine size and shape of items to be sawed, sawing machines to set up, and sequence of sawing operations.

92305 - Head Sawyers - Operate head saws and feed carriages to saw logs into rough cants or boards from heading bolts.

92308 - Sawing Machine Operators and Tenders - Operate or tend wood-sawing machines, such as circular saws, band saws, multiple blade sawing machines, scroll saws, rip saws, equalizer saws, power saws, and crozer machines. Duties include: sawing logs to specifications; cutting lumber to specified dimensions; sawing curved or irregular designs; trimming edges and removing defects from lumber; or cutting grooves, bevel, and miter according to specifications or work orders.

92311 - Woodworking Machine Setters and Set-up Operators, Except Sawing - Set up or set up and operate woodworking machines, such as lathes, drill presses, sanders, shapers, and planing machines, to perform woodworking operations. Exclude Sawing Machine Setters and Set-up Operators.

92314 - Woodworking Machine Operators and Tenders, Except Sawing - Operate or tend woodworking machines, such as drill presses, lathes, shapers, routers, sanders, planers, and wood-nailing machines to perform woodworking operations. Exclude Sawyers.

Printing, Binding, and Related Occupations

92512 - Offset Lithographic Press Setters and Set-up Operators - Set up or set up and operate offset printing press, either sheet or web fed, to print single and multicolor copy from lithographic plates. Examine job order to determine press operating time, quantity to be printed, and stock specifications.

92515 - Letterpress Setters and Set-Up Operators - Set up or set up and operate direct relief letterpresses, either sheet or roll (web) fed, to produce single or multicolor printed material, such as newspapers, books, and periodicals.

92519 - All Other Printing Press Setters and Set-Up Operators - All other printing press setters and set-up operators not classified separately above.

92524 - Screen Printing Machine Setters and Set-up Operators - Set up or set up and operate screen printing machines to print designs onto articles and materials, such as glass or plasticware, cloth, and paper.

92525 - Bindery Machine Setters and Set-up Operators - Set up or set up and operate machines that perform some or all of the following functions in order to produce books, magazines, pamphlets, catalogs, and other printed materials: gathering, folding, cutting, stitching, rounding and backing, supering, casing-in, lining, pressing, and trimming.

92541 - Typesetting and Composing Machine Operators and Tenders - Operate or tend typesetting and composing equipment, such as phototypesetters, linotype or monotype keyboard machines, photocomposers, linocasters, and photoletterers. Exclude Data Entry Keyers of computerized systems.

92543 - Printing Press Machine Operators and Tenders - Operate or tend various types of printing machines, such as offset lithographic presses, letter or letterset presses, flexographic or gravure presses, to produce print on paper or other materials such as plastic, cloth, or rubber.

92545 - Photoengraving and Lithographing Machine Operators and Tenders - Operate or tend photoengraving and lithographing equipment, such as plate graining, pantograph, roll varnishing, and routing machines.

92546 - Bindery Machine Operators and Tenders - Operate or tend binding machines that round, back, case, line stitch, press, fold, trim, or perform other binding operations on books and related articles. Exclude Hand Bindery Workers and Machine Feeders and Offbearers.

92549 - All Other Printing, Binding, and Related Machine Operators and Tenders - All other printing, binding, and related machine operators and tenders not classified separately above.

Textile and Related Setters, Operators, and Related Occupations

92705 - Textile Machine Operators and Tenders, Winding, Twisting, Knitting, Weaving, and Cutting - Operate or tend textile machines that perform textile processing and manufacturing operations, such as winding, twisting, knitting, weaving, and cutting, using knowledge of machine functions. Exclude Textile Sewing Machine Operators and Tenders.

92717 - Sewing Machine Operators, Garment - Operate or tend sewing machines to perform garment sewing operations, such as joining, reinforcing, or decorating garments or garment parts. Include sewing machine operators and tenders who perform specialized or automatic sewing machine functions, such as buttonhole making or tacking.

92721 - Sewing Machine Operators, Nongarment - Operate or tend sewing machines to join together, reinforce, decorate, or perform related sewing operations in the manufacture of nongarment products, such as upholstery, draperies, linens, carpets, and mattresses.

92726 - Laundry and Dry-Cleaning Machine Operators and Tenders, Except Pressing - Operate or tend washing or dry-cleaning machines to wash or dry-clean commercial, industrial, or household articles, such as cloth garments, suede, leather, furs, blankets, draperies, fine linens, rugs, and carpets.

92728 - Pressing Machine Operators and Tenders, Textile, Garment, and Related Materials - Operate or tend pressing machines, such as hot-head pressing, steam pressing, automatic pressing, ironing, plunger pressing, and hydraulic pressing machines, to press and shape articles such as leather, fur, and cloth garments, drapes, slipcovers, handkerchiefs, and millinery. Exclude Delicate Fabric (Precision) Pressers.

Other Machine Setters, Set-Up Operators, Operators, and Tenders- Except Metal and Plastic

92905 - Motion Picture Projectionists - Set up and operate motion picture projection and sound reproduction equipment.

92908 - Photographic Processing Machine Operators and Tenders - Operate or tend photographic processing machines, such as motion picture film printing machines, photographic printing machines, film developing machines, and mounting presses, according to job specifications.

92914 - Paper Goods Machine Setters and Set-Up Operators - Set up or set up and operate paper goods machines that perform a variety of functions, such as converting, sawing, corrugating, banding, wrapping, boxing, stitching, forming, or sealing paper or paperboard sheets into products, such as toilet tissue, towels, napkins, bags, envelopes, tubing, cartons, wax rolls, and containers.

92917 - Cooking Machine Operators and Tenders, Food and Tobacco - Operate or tend cooking equipment, such as steam cooking vats, deep fry cookers, pressure cookers, kettles, and boilers, to prepare food products, such as meats, sugar, cheese, and grain. Exclude Food Roasting, Baking, and Drying Machine Operators and Tenders.

92921 - Roasting, Baking, and Drying Machine Operators and Tenders, Food and Tobacco - Operate or tend roasting, baking, or drying equipment to: Reduce moisture content of food or tobacco products, such as tobacco, cocoa and coffee beans, macaroni, and grain; roast grain, nuts, or coffee beans; bake bread or other bakery products; or process food preparatory to canning. These machines include hearth ovens, kiln driers, roasters, char kilns, steam ovens, and vacuum drying equipment.

92923 - Furnace, Kiln, Oven, Drier, or Kettle Operators and Tenders - Operate or tend heating equipment other than basic metal or plastic processing equipment. Oven Operators or Tenders: Bake fiberglass or painted products, fuse glass or enamel to metal products, carbonize coal, or cure rubber or other products. Furnace Operators or Tenders: Anneal glass, roast sulfur, convert chemicals, or process petroleum. Kettle Operators and Tenders: Boil soap, or melt antimony or asphalt materials. Drier Operators and Tenders: Remove moisture from paper, chemicals, ore, clay products, or slurry. Kiln Operators and Tenders: Heat minerals, dry lumber, fire greenware, anneal glassware, or bake clay products.

92926 - Boiler Operators and Tenders, Low Pressure - Operate or tend low pressure stationary steam boilers and auxiliary steam equipment, such as pumps, compressors and air conditioning equipment, to supply steam heat for office buildings, apartment houses, or industrial establishments; to maintain steam at specified pressure aboard marine vessels; or to generate and supply compressed air for operation of pneumatic tools, hoists, and air lances.

92932 - Dairy Processing Equipment Operators, Including Setters - Set up, operate, or tend continuous flow or vat-type equipment to process milk, cream, or other dairy products, following specified methods and formulas.

92935 - Chemical Equipment Controllers and Operators - Control or operate equipment to control chemical changes or reactions in the processing of industrial or consumer products. Exclude operators who control equipment centrally controlled through panel boards.

92938 - Chemical Equipment Tenders - Tend equipment in which a chemical change or reaction takes place in the processing of industrial or consumer products. Typical equipment used are: Devulcanizers, batch stills, fermenting tanks, steam-jacketed kettles, and reactor vessels.

92941 - Cutting and Slicing Machine Setters and Set-Up Operators - Set up or set up and operate machines that cut or slice materials, such as glass, stone, cork, rubber, crepe, wallboard, and fibrous insulating board, to specified dimensions for further processing. Exclude Wood Sawyers, Metal or Plastic Sawyers, Shear or Slitter Operators, and Textile Setters and Set-up Operators.

92944 - Cutting and Slicing Machine Operators and Tenders - Operate or tend machines to cut or slice any of a wide variety of products or materials, such as tobacco, food, paper, roofing slate, glass, stone, rubber, cork, and insulating material. Exclude Metal, Wood, and Plastic Sawing Machine Operators and Tenders, and Textile Cutting Machine Operators and Tenders.

92947 - Painters, Transportation Equipment - Operate or tend painting machines to paint surfaces of transportation equipment, such as automobiles, buses, trucks, boats, and airplanes.

92951 - Coating, Painting, and Spraying Machine Setters and Set-Up Operators - Set up or set up and operate machines to coat or paint any of a wide variety of products, such as food products, glassware, and cloth, ceramic, metal, plastic, paper, and wood products, with lacquer, silver and copper solution, rubber, paint, varnish, glaze, enamel, oil, or rust-proofing materials. Exclude setters and set-up operators who coat or plate metal or plastic with metal using electrolytic or nonelectrolytic processes.

92953 - Coating, Painting, and Spraying Machine Operators and Tenders - Coating Machine Operators or Tenders: Operate or tend machines to coat any of a wide variety of items: Coating food products with sugar, chocolate, or butter; coat paper and paper products with chemical solutions, wax, or glazes; or coat fabric with rubber or plastic. Painting and Spraying Machine Operators and Tenders: Operate or tend machines to spray or paint decorative, protective, or other coating or finish, such as adhesive, lacquer, paint, stain, latex, preservative, oil, or other solutions. May apply coating or finish to any of a wide variety of items or materials, such as wood and wood products, ceramics, and glass. Include workers who apply coating or finish to materials preparatory to further processing or to consumer use.

92956 - Cementing and Gluing Machine Operators and Tenders - Operate or tend cementing and gluing machines to join together items to form a completed product or to form an article for further processing. Processes include: Joining veneer sheets into plywood; gluing paper to glass wool, cardboard or paper; joining rubber and rubberized fabric parts, plastic, simulated leather, and other materials.

92958 - Cleaning, Washing, and Pickling Equipment Operators and Tenders - Operate or tend machines to wash or clean items, such as barrels or kegs, glass products, tinplate surfaces, dried fruit, pulp, animal stock, coal, manufactured articles, plastic, or rubber, to remove impurities preparatory to further processing.

92962 - Separating, Filtering, Clarifying, Precipitating, and Still Machine Operators and Tenders - Operate or tend machines such as filter presses, shaker screens, centrifuges, condenser tubes, precipitator tanks, fermenting tanks, evaporating tanks, scrubbing towers and batch stills. These machines extract, sort, or separate liquids, gases, or solid materials from other materials in order to recover a refined product or material. Exclude workers who operate equipment to control chemical changes or reactions.

92965 - Crushing, Grinding, Mixing, and Blending Machine Operators and Tenders - Crushing, Grinding, and Polishing Machine Operators and Tenders: Operate or tend machines to crush or grind any of a wide variety of materials, such as coal, glass, plastic, dried fruit, grain, stone, chemicals, food, or rubber; or operate or tend machines that buff and polish materials or products, such as stone, glass, slate, plastic or metal trim, bowling balls, or eyeglasses. Mixing and Blending Machine Operators and Tenders: Operate or tend machines to mix or blend any of a wide variety of materials, such as spices, dough batter, tobacco, fruit juices, chemicals, livestock feed, food products, color pigments, or explosive ingredients.

92968 - Extruding, Forming, Pressing, and Compacting Machine Setters and Set-Up Operators - Set up or set up and operate machines, such as glass forming machines, plodder machines, and tuber machines, to manufacture any of a wide variety of products, such as soap bars, formed rubber, glassware, food, brick, and tile, by means of extruding, compressing, or compacting.

92971 - Extruding, Forming, Pressing, and Compacting Machine Operators and Tenders - Operate or tend machines to shape and form any of a wide variety of manufactured products, such as glass bulbs, molded food and candy, rubber goods, clay products, wax products, tobacco plugs, cosmetics, or paper products, by means of extruding, compressing or compacting.

92974 - Packaging and Filling Machine Operators and Tenders - Operate or tend machines, such as filling machines, casing-running machines, ham-rolling machines, preservative-filling machines, baling machines, wrapping machines, and stuffing machines, to prepare industrial or consumer products, such as gas cylinders, meat and other food products, tobacco, insulation, ammunition, stuffed toys, and athletic equipment for storage or shipment.

92997 - All Other Machine Setters and Set-Up Operators - All other machine setters and set-up operators not classified separately above.

92998 - All Other Machine Operators and Tenders - All other machine operators and tenders not classified separately above.

Hand Working Occupations, Including Assemblers and Fabricators

Precision Assemblers

93105 - Machine Builders and Other Precision Machine Assemblers - Construct, assemble, or rebuild machines, such as engines, turbines, and office machines, or equipment used in construction, oil fields, rolling mills, textile and paper manufacturing, woodworking, printing, and food wrapping. Fit or assemble components or subassemblies. Install moving parts. Assemble systems of gears by aligning and meshing gears in gearbox. May test or assist in testing of completed product.

93108 - Fitters, Structural Metal, Precision - Lay out, position, align, and fit together fabricated parts of structural metal products preparatory to welding or riveting.

93111 - Electromechanical Equipment Assemblers, Precision - Assemble, test, and prepare electromechanical equipment or devices, such as servomechanisms, gear trains, gyros, dynamometers, ejection seat mechanisms, wave guides, magnetic drums, tape drives, brakes, control linkage, actuators, and gearbox mechanisms, according to specifications.

93114 - Electrical and Electronic Equipment Assemblers, Precision - Assemble or modify prototypes or final assemblies of electrical or electronic equipment, such as missile control systems, radio and test equipment, computers, numerical control machine tools, radar, sonar, telemetering systems, or appliances. Include workers who primarily assemble electrical systems for machinery.

93197 - All Other Precision Assemblers - All other precision assemblers not classified separately above.

Other Hand Workers, Including Assemblers and Fabricators

93905 - Electrical and Electronic Assemblers - Perform electrical and electronic assembly work at a level less than that required of precision assemblers. Include Electronic Wirers, Armature Connectors, Electric Motor Winders, Skein Winders, Carbon Brush Assemblers, Battery and Battery Parts Assemblers, Electric Sign Assemblers, and Electrical and Electronic Subassemblers.

93908 - Coil Winders, Tapers, and Finishers - Wind wire coils used in electrical components, such as resistors and transformers, and in electrical equipment and instruments, such as field cores, bobbins, armature cores, electrical motors, generators, and control equipment. May involve the use of coil-winding and coil-making machines.

93914 - Welders and Cutters - Use hand-welding and flame-cutting equipment, such as arc welders, gas welders, and gas torches, to weld together metal components of such products as pipelines, automobiles, boilers, and ships; to join together components of fabricated sheet metal assemblies; or to cut, trim, or scarf metal objects to dimensions, as specified by layout, work orders, or blueprints.

93917 - Solderers and Brazers - Use hand soldering and brazing equipment to join together metal parts or components of metal products, or to fill holes, indentations, and seams of fabricated metal products.

93921 - Pressers, Hand - Press articles to remove wrinkles, flatten seams, and give shape by using hand iron. Articles pressed include: Drapes, knit goods, millinery parts, parachutes, garments, slipcovers, and textiles such as lace, rayon, and silk. May block (shape) knitted garments after cleaning. May press leather goods.

93923 - Sewers, Hand - Sew, join, reinforce, or finish, usually with needle and thread, any of a wide variety of manufactured items, such as shoes, hats, umbrellas, rugs, baseballs, and hosiery. Include Weavers, Stitchers, and Finishers. Exclude Hand Sewers who repair articles.

93926 - Cutters and Trimmers, Hand - Use hand tools or hand-held power tools to cut and trim a variety of manufactured items, such as stone, glass, or rubber. Exclude Portable Machine Cutters who use patterns to cut multiple layers of fabric.

93928 - Portable Machine Cutters - Use portable electric cutter to cut multiple layers of fabric into parts for articles, such as awnings, fitted sheets, garments, hats, stuffed toys, and upholstered furniture.

93935 - Cannery Workers - Perform any of a variety of routine tasks in canning, freezing, preserving, or packing food products. Duties may include sorting, grading, washing, peeling, trimming, or slicing agricultural produce.

93938 - Meat, Poultry, and Fish Cutters and Trimmers, Hand - Use hand tools to perform a wide variety of food cutting and trimming tasks that require skills less than that of the precision level. Include Meat Boners, Carcass Splitters, Poultry Eviscerators, Fish Cleaners and Butchers, Skinners, and Stickers.

93941 - Metal Pourers and Casters, Basic Shapes - Operate hand-controlled mechanisms adjunctive to specialized machinery and equipment to pour and regulate the flow of molten metal into molds for producing castings or ingots of specific quality and size. Include Steel Pourers, Casters, and Ladle and Metal Pourers.

93944 - Molders and Casters, Hand - Mold and cast, using hand tools or hand-held power tools, any of a wide variety of items, such as food products, lamps, figurines, ashtrays, tile, pipes, mannequins, and candles. Include Candy Molders, Pottery and Porcelain Casters, Refractory Molders, Concrete Vault Makers, and Candle Molders. Exclude Metal Pourers who cast basic shapes such as slabs, blooms, bars, or billets.

93947 - Painting, Coating, and Decorating Workers, Hand - Paint, coat, and decorate, using hand tools or hand-held power tools, a wide variety of manufactured items, such as furniture, glass and plateware, lamps, jewelry, books, or leather products. Include Inlayers, Stainers, Enamelers, and Decal Appliers.

93951 - Engraving and Printing Workers, Hand - Engrave and print, using hand tools or hand-held power tools, patterns, designs, etchings, trademarks, or lettering onto flat or curved surfaces of a wide variety of metal, glass, plastic, or paper items (e.g., name plates, glass, optical glass, bowling balls, tags, and stamps). Include workers below the precision level such as Etcher-Circuit Processors, Pantograph Engravers, and Silk Screen Etchers.

93953 - Grinding and Polishing Workers, Hand - Grind and polish, using hand tools or hand-held power tools, a wide variety of metal, stone, clay, plastic, and glass objects or parts. Include Grinders and Chippers, Polishers and Buffers, Metal Sanders and Finishers, Glass Grinders and Polishers, and Plastic Buffers and Finishers. Exclude precision-level workers.

93956 - Assemblers and Fabricators, Except Machine, Electrical, Electronic, and Precision - Assemble or fit together parts to form complete units or subassemblies at a bench, conveyor line, or on the floor. Work may involve the use of hand tools, power tools, and special equipment in order to carry out fitting and assembly operations. Include assemblers whose duties are of a non-precision nature. Exclude electrical, electronic, machine, and precision assemblers, and workers who perform specialized operations exclusively as a part of assembly operations, such as riveting, welding, soldering, machining, or sawing.

93999 - All Other Hand Workers - All other hand workers not classified separately above.

Plant and System Occupations

95002 - Water and Liquid Waste Treatment Plant and System Operators - Operate or control an entire process or system of machines, often through the use of panelboards, control boards, or semiautomatic equipment, to transfer or treat water and/or liquid waste.

95005 - Gas Plant Operators - Distribute or process gas for utility companies and others. Distribute gas for an entire plant or process, often using panelboards, control boards, or semi-automatic equipment.

95008 - Chemical Plant and System Operators - Control or operate an entire chemical process or system of machines, such as reduction pots and heated air towers, through the use of panelboards, control boards, or semi-automatic equipment.

95014 - Petroleum Refinery and Control Panel Operators - Analyze specifications and control continuous operation of petroleum refining and processing units. Operate control panel to regulate temperature, pressure, rate of flow, and tank level in petroleum refining unit, according to process schedules.

95017 - Gaugers - Gauge and test oil in storage tanks. Regulate flow of oil into pipelines at wells, tank farms, refineries, and marine and rail terminals, following prescribed standards and regulations.

95021 - Power-Generating Plant Operators, Except Auxiliary Equipment Operators - Control or operate machinery, such as steam-driven turbogenerators, to generate electric power, often through the use of panelboards, control boards, or semi-automatic equipment. Exclude workers operating auxiliary equipment, such as pumps, fans, compressors, filters, feedwater heaters, chlorinators, and condensers.

95023 - Auxiliary Equipment Operators, Power - Control and maintain auxiliary equipment, such as pumps, fans, compressors, condensers, feedwater heaters, filters, and chlorinators, that supply water, fuel, lubricants, air, and auxiliary power for turbines, generators, boilers, and other power-generating plant facilities.

95028 - Power Distributors and Dispatchers - Coordinate, regulate, or distribute electricity or steam in generating stations and substations, and over electric power lines. May work for utility company or in a large industrial establishment. May spend some time generating power.

95032 - Stationary Engineers - Operate and maintain stationary engines and mechanical equipment to provide utilities for buildings or industrial processes. Operate equipment such as steam engines, generators, motors, turbines, and steam boilers.

95099 - All Other Plant and System Operators - All other plant and system operators not classified separately above.

Transportation and Material-Moving Machine and Vehicle Operators Motor Vehicle Operators

97102 - Truck Drivers, Heavy or Tractor-Trailer - Drive a tractor-trailer combination or a truck with a capacity of at least 3 tons, to transport and deliver goods, livestock, or materials in liquid, loose or packaged form. May be required to unload truck.

97105 - Truck Drivers, Light, Include Delivery and Route Workers - Drive a truck, van, or automobile with a capacity under 3 tons. May drive light truck to deliver or pick up merchandise. May load and unload truck.

97108 - Bus Drivers, Except School - Drive bus, transporting passengers over specified routes to local or distant points according to a time schedule. Assist passengers with baggage. Collect tickets or cash fares.

97111 - Bus Drivers, School - Transport students between pickup points and school. Maintain order during trip and adhere to safety rules when loading and unloading pupils.

97114 - Taxi Drivers and Chauffeurs - Drive automobiles, limousines, custom-built sedans, or hearses to transport passengers or cargo. May drive automobiles for delivery. Exclude Ambulance Drivers and Bus Drivers.

97117 - Driver/Sales Workers - Drive truck or other vehicle over established routes to: Deliver and sell goods, such as food products; pick up and deliver items, such as laundry; or refill and collect coins from vending machines. Include Newspaper Delivery Drivers.

97199 - All Other Motor Vehicle Operators - All other motor vehicle operators not classified separately above.

Rail Transportation Occupations

97302 - Railroad Conductors and Yardmasters - Conductors: Coordinate activities of train crew engaged in transporting or providing services to passengers on passenger train, or in transporting freight on freight train. Coordinate activities of switch-engine crew engaged in switching railroad cars within yard of railroad, industrial plant, or similar location. Yardmasters: Coordinate activities of workers engaged in railroad traffic operations, such as the makeup or breakup of trains and switching inbound or outbound traffic of railroad yard on a specified section of line. Review train schedules and switching orders.

97305 - Locomotive Engineers - Drive electric, diesel-electric, steam, or gas-turbine-electric locomotives to transport passengers or freight. Interpret train orders, block or semaphore signals, and railroad rules and regulations.

97308 - Rail Yard Engineers, Dinkey Operators, and Hostlers - Drive switching or other locomotive or dinkey engines within railroad yard, industrial plant, quarry, construction project, or similar location.

97317 - Railroad Brake, Signal, and Switch Operators - Operate railroad track switches. Couple or uncouple rolling stock to make up or break up trains. Signal engineers and set warning signals. May inspect couplings, air hoses, journal boxes, and hand brakes.

97399 - All Other Rail Vehicle Operators and Controllers - All other workers who operate on-track mobile equipment, except locomotives and mass transit vehicles. Include workers who control railroad equipment from yard tower or operate turntables. Exclude section-gang workers who operate equipment to build and repair track and track beds.

Water Transportation and Related Workers

97511 - Motorboat Operators - Operate motor-driven boats to carry passengers and freight; take depth soundings in turning basin; serve as liaison between ships, ship to shore, harbor and beach, or area patrol.

Air Transportation Occupations

97702 - Aircraft Pilots and Flight Engineers - Pilot and navigate flight of private or commercial aircraft for the transportation of passengers, freight, mail, or for other purposes. Must be federally licensed. Include workers concerned with flight operations and maintenance when a pilot's or flight engineer's license is required. Include Test Pilots, Helicopter Pilots, and pilots who accompany other pilots to periodically test and review proficiency.

Other Transportation and Related Occupations

97802 - Bridge, Lock, and Lighthouse Tenders - Operate and tend bridges, canal locks, and lighthouses to permit marine passage on inland waterways, near shores, and at danger points in waterway passages. May supervise such operations. Include Drawbridge Operators, Lock Tenders and Operators, and Slip Bridge Operators.

97805 - Service Station Attendants - Service automobiles, buses, trucks, boats, and other automotive or marine vehicles with fuel, lubricants, and accessories. Collect payment for services and supplies. May lubricate vehicle, change motor oil, install antifreeze, or replace lights or other accessories such as windshield wiper blades or fan belts. May repair or replace tires.

97808 - Parking Lot Attendants - Park autos or issue tickets for customers in a parking lot or garage.

97899 - All Other Transportation and Related Workers - All other transportation and related workers not classified separately above.

Material Moving Equipment Operators

97908 - Oil Pumps, Except Wellhead - Operate steam, natural gas, gasoline, electric, or diesel pumps and auxiliary equipment to restore and control flow of oil from wells.

97911 - Wellhead Pumps - Operate power pumps and auxiliary equipment to produce artificial flow of oil or gas from wells in oil field.

97917 - Gas Pumping Station Operators - Control the operation of steam, gas, or electric- motor-driven compressor to maintain specified pressures on high and low-pressure mains dispensing gas from gasholders.

97921 - Gas Compressor Operators - Operate steam or internal combustion engines to transmit, compress, or recover gases, such as butane, nitrogen, hydrogen, and natural gas, in various production processes.

97923 - Excavating and Loading Machine Operators - Operate or tend machinery equipped with scoops, shovels, or buckets, to excavate and load loose materials. Exclude Dredge and Dragline Operators.

97926 - Dragline Operators - Operate power-driven crane equipment with dragline bucket to excavate or move sand, gravel, mud, or other materials.

97928 - Dredge Operators - Operate power-driven dredge to mine sand, gravel, or other materials from lakes, rivers, or streams; and to excavate and maintain navigable channels in waterways.

97932 - Loading Machine Operators, Underground Mining - Operate underground loading machine to load coal, ore, or rock into shuttle or mine car or onto conveyors. Loading equipment may include power shovels, hoisting engines equipped with cable-drawn scraper or scoop, or machines equipped with gathering arms and conveyor.

97935 - Shuttle Car Operators - Operate diesel or electric-powered shuttle car in underground mine, to transport materials from working face to mine cars or to conveyor.

97938 - Grader, Bulldozer, and Scraper Operators - Operate machine or vehicle equipped with blades to remove, distribute, level, or grade earth. Exclude Paving, Surfacing, and Tamping Equipment Operators.

97941 - Hoist and Winch Operators - Operate or tend hoists or winches to lift and pull loads using power-operated cable equipment. Exclude Crane and Tower Operators.

97944 - Crane and Tower Operators - Operate mechanical boom and cable or tower and cable equipment to lift and move materials, machines, or products in many directions. Exclude Dragline Operators.

97947 - Industrial Truck and Tractor Operators - Operate gasoline or electric-powered industrial trucks or tractors equipped with forklift, elevated platform, or trailer hitch to move materials around a warehouse, storage yard, factory, construction site, or similar location. Exclude Logging Tractor Operators.

97951 - Conveyor Operators and Tenders - Control or tend conveyors or conveyor systems that move materials or products to and from stockpiles, processing stations, departments, vehicles, and underground workings. May control speed and routing of materials or products.

97953 - Pump Operators - Tend, control, or operate power-driven, stationary, or portable pumps and manifold systems, to transfer gases, liquids, slurries, or powdered materials to and from various vessels and processes.

97956 - Operating Engineers - Operate several types of power construction equipment, such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers, or motor graders to excavate, move and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties. Exclude workers who specialize in operation of a single type of heavy equipment, such as a bulldozer or crane.

97989 - All Other Material-Moving Equipment Operators - All other material-moving equipment operators not classified separately above.

97999 - All Other Transportation and Material-Moving Equipment Operators - All other transportation and material-moving equipment operators not classified separately above.

Helpers, Laborers, and Material Movers, Hand - Except Agriculture and Forestry Laborers

Helpers - Mechanics and Repairers

98102 - Helpers, Mechanics and Repairers - Help mechanics and repairers in maintenance, parts replacement, and repair of vehicles, industrial machinery, and electrical and electronic equipment. Perform duties such as furnishing tools, materials, and supplies to other workers; cleaning work area, machines, and tools; and holding materials or tools for other workers.

Helpers - Construction Trades and Extractive Workers

98311 - Helpers, Brick and Stonemasons and Hard Tile Setters - Help Brickmasons, Stonemasons, or Hard Tile Setters by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Brickmasons, Stonemasons, or Hard Tile Setters.

98312 - Helpers, Carpenters and Related Workers - Help Carpenters or carpentry-related craft workers by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Carpenters or carpentry-related craft workers.

98313 - Helpers, Electricians and Power-Line Transmission Installers - Help Electricians or Power-line Transmission Installers by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Electricians or Power-line Transmission Installers.

98314 - Helpers, Painters, Paperhangers, Plasterers, and Stucco Masons - Help Painters, Paperhangers, Plasterers, or Stucco Masons by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Painters, Paperhangers, Plasterers, or Stucco Masons.

98315 - Helpers, Plumbers, Pipefitters, and Steamfitters - Help Plumbers, Pipefitters, or Steamfitters by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Plumbers, Pipefitters, or Steamfitters.

98316 - Helpers, Roofers - Help Roofers by performing duties of lesser skill. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude construction or maintenance laborers who do not primarily assist Roofers.

98319 - Helpers, All Other Construction Trades Workers - All other construction trades helpers not classified separately above.

98323 - Helpers, Extractive Workers - Help extractive craft workers, such as Earth Drillers, Blasters and Explosives Workers, Derrick Operators, and Mining Machine Operators, by performing duties of lesser skill. Duties include supplying equipment or cleaning work area. Exclude apprentice workers and report them with the appropriate construction or maintenance trade occupation. Exclude laborers who do not primarily assist extractive craft workers.

Machine Feeders and Offbearers

98502 - Machine Feeders and Offbearers - Feed materials into or remove materials from machines or equipment that is automatic or tended by other workers.

Freight, Stock, and Material Movers, Hand

98705 - Refuse and Recyclable Material Collectors - Collect refuse or recyclable materials from containers and put into truck, on a designated route.

98799 - All Other Freight, Stock, and Material Movers, Hand - All other freight, stock, and material movers, hand, not classified separately above.

Other Helpers, Laborers, and Material Movers, Hand

98902 - Hand Packers and Packagers - Pack or package by hand a wide variety of products and materials. Exclude workers whose jobs require more than minimum training.

98905 - Vehicle Washers and Equipment Cleaners - Wash or otherwise clean vehicles, machinery, and other equipment. Use such materials as water, cleaning agents, brushes, cloths, and hoses. Exclude Janitors and Building Cleaners.

98999 - All Other Helpers, Laborers, and Material Movers, Hand - All other helpers, laborers, and material movers, hand, not classified separately above.